Python For Kids A Playful Introduction To Programming

For kids and beginners of all ages, this picture book teaches you how to code in the Python programming language through an illustrated story. Learning Python has never been this fun...or fast!

Python for beginners - you'll learn how to build amazing graphics, fun games, and useful apps using Python, an easy yet powerful free programming language available for download. A perfect introduction to Python coding for kids ages 10 and over who are ready to take the next step after Scratch - all they need is a desktop or laptop, and an internet connection to download Python 3. Using fun graphics and easy-to-follow instructions, this straightforward, visual guide shows young learners how to build their own computer projects using Python. Step-by-step instructions teach essential coding basics like loops and conditionals, and outline 14 fun and exciting projects. Included is a script that cracks secret codes, a quiz to challenge family and friends, a matching game, and more. When they feel more confident, kids can think creatively and use the tips and tricks provided to personalize and adapt each project. The simple, logical steps in Coding Projects in Python are fully illustrated with fun pixel art and build on the basics of coding. Kids will eventually have the skills to build whatever kind of project they can dream up - the only limit is your imagination! Create, Remix and Customize! Create crazy games, crack fiendish codes, and compose crafty quizzes with this amazing collection of Python projects. Suitable for beginners and experts alike, Coding Projects in Python has everything enthusiastic coders need. Follow the simple steps to learn how to write code in this popular programming language and improve your programming skills, while you learn to create, remix, and customize your own projects. The material in this educational book is example based and the colors and humor keep children engaged while they learn to code. If your child is ready for the next step after mastering Scratch, this is the book to get! Inside this guide, you will learn about: - Starting with Python and first steps - Creating cool graphics and playful apps - Getting acquainted with games in Python Supporting STEM education initiatives, computer coding teaches kids how to think creatively, work collaboratively, and reason systematically, and is quickly becoming a necessary and sought-after skill. DK's computer coding books for kids are full of fun exercises with step-by-step guidance, making them the perfect introductory tools for building vital skills in computer programming. Coding Projects in Python is the third in an awesome coding book series for kids. Add Coding Projects in Scratch and Coding Games in Scratch to your collection.

A project-filled introduction to coding that shows kids how to build programs by making cool games. Scratch, the colorful drag-and-drop programming language, is used by millions of first-time learners worldwide. Scratch 3 features an updated interface, new programming blocks, and the ability to run on tablets and smartphones, so you can learn how to code on the go. In Scratch 3 Programming Playground, you'll learn to code by making cool games. Get ready to destroy asteroids, shoot hoops, and slice and dice fruit! Each game includes easy-to-follow instructions with full-color images, review questions, and creative coding challenges to make the game your own. Want to add more levels or a cheat code? No problem, just write some code. You'll learn to make games like: • Maze Runner: escape the maze! • Snaaaaaake: gobble apples and avoid your own tail • Asteroid Breaker: smash space rocks • Fruit Slicer: a Fruit Ninja clone • Brick Breaker: a remake of Breakout, the brick-breaking classic • Platformer: a game inspired by Super Mario Bros Learning how to program shouldn't be dry and dreary. With Scratch 3 Programming Playground, you'll make a game of it! Covers: Scratch 3

A hands-on, application-based introduction to machine learning and artificial intelligence (AI) that guides young readers through creating compelling AI-powered games and applications using the Scratch programming language. Machine learning (also known as ML) is one of the building blocks of AI, or artificial intelligence. AI is based on the idea that computers can learn on their own, with your help. Machine Learning for Kids will introduce you to machine learning, painlessly. With this book and its free, Scratch-based, award-winning companion website, you'll see how easy it is to add machine learning to your own projects. You don't even need to know how to code! As you work through the book you'll discover how machine learning systems can be taught to recognize text, images, numbers, and sounds, and how to train your models to improve their accuracy. You'll turn your models into fun computer games and apps, and see what happens when they get confused by bad data. You'll build 13 projects step-by-step from the ground up, including: • Rock, Paper, Scissors game that recognizes your hand shapes • An app that recommends movies based on other movies that you like • A computer character that reacts to insults and compliments • An interactive virtual assistant (like Siri or Alexa) that obeys commands • An AI version of Pac-Man, with a smart character that knows how to avoid ghosts NOTE: This book includes a Scratch tutorial for beginners, and step-by-step instructions for every project. Ages 12+

The kid-friendly way to learning coding with Python Calling all wanna-be coders! Experts point to Python as one ofthe best languages to start with when you're learning coding, andPython For Kids For Dummies makes it easier than ever.Packed with approachable, bite-sized projects that won't make youlose your cool, this fun and friendly guide teaches the basics ofcoding with Python in a language you can understand. In no time,you'll be installing Python tools, creating guessing games,building a geek speak translator, making a trivia game,constructing a Minecraft chat client, and so much more. Whether you don't have the opportunity to take coding classes atschool or in camp—or just simply prefer to learn on yourown—Python For Kids For Dummies makes gettingacquainted with this popular coding language fast and easy. Itwalks you step-by-step through basic coding projects and provideslots of hands-on tasks that give you a sweet sense ofaccomplishment when you complete them. What's not to love aboutthat? Navigate the basics of coding with the Python language Create your own applications and games Find help from other Python users Expand your technology skills with Python If you're a pre-to-early-teen looking to add coding skills toyour creativity toolbox, Python For Kids For Dummies isyoursure-fire weapon for getting up and running with one of the hottestprogramming languages around.

You've bested creepers, traveled deep into caves, and maybe even gone to The End and back—but have you ever

transformed a sword into a magic wand? Built a palace in the blink of an eye? Designed your own color-changing disco dance floor? In Learn to Program with Minecraft®, you'll do all this and more with the power of Python, a free language used by millions of professional and first-time programmers! Begin with some short, simple Python lessons and then use your new skills to modify Minecraft to produce instant and totally awesome results. Learn how to customize Minecraft to make mini-games, duplicate entire buildings, and turn boring blocks into gold. You'll also write programs that: –Take you on an automated teleportation tour around your Minecraft world –Build massive monuments, pyramids, forests, and more in a snap! –Make secret passageways that open when you activate a hidden switch –Create a spooky ghost town that vanishes and reappears elsewhere –Show exactly where to dig for rare blocks –Cast a spell so that a cascade of flowers (or dynamite if you're daring!) follows your every move –Make mischief with dastardly lava traps and watery curses that cause huge floods Whether you're a Minecraft megafan or a newbie, you'll see Minecraft in a whole new light while learning the basics of programming. Sure, you could spend all day mining for precious resources or building your mansion by hand, but with the power of Python, those days are over! Requires: Windows 7 or later; OS X 10.10 or later; or a Raspberry Pi. Uses Python 3

Getting acquainted with your Raspberry Pi has never been sweeter Raspberry Pi For Kids For Dummies makes it easy for kids to set-up, operate, and troubleshoot like a Pi pro! Introducing you to Pi through a series of entertaining and inspiring projects, this handy, step-by-step guide shows you how to write computer games, build websites, make art and music, create electronic projects, and much more! From downloading the operating system and setting up your Raspberry Pi to creating art in Tux Paint and designing games with Scratch, everything you need to have fun with Pi is inside! Raspberry Pi For Kids For Dummies leaves the confusing tech talk behind and explains in plain English how to unleash all the cool possibilities of Pi, like playing Minecraft in Python, using HTML to make a website, managing and customizing your Raspberry Pi, playing music with Sonic Pi, and understanding and playing with the GPIO. Teaches the basics of Raspberry Pi in a simple and thorough approach Shows you how to zoom around Pi, all while learning valuable programming skills Offers tons of exciting projects to keep you engaged as you learn Includes instruction on everything you need to troubleshoot Raspberry Pi If you're aspiring computer programmer age 8-18 and want to start having fun with Pi, look no further than Raspberry Pi For Kids For Dummies.

Explains how to leverage the revolutionary Raspberry Pi computer in order to learn the versatile Python programming language. Original.

Teach Your Kids to Code is a parent's and teacher's guide to teaching kids basic programming and problem solving using Python, the powerful language used in college courses and by tech companies like Google and IBM. Step-by-step explanations will have kids learning computational thinking right away, while visual and game-oriented examples hold their attention. Friendly introductions to fundamental programming concepts such as variables, loops, and functions will help even the youngest programmers build the skills they need to make their own cool games and applications. Whether you've been coding for years or have never programmed anything at all, Teach Your Kids to Code will help you show your young programmer how to: –Explore geometry by drawing colorful shapes with Turtle graphics –Write programs to encode and decode messages, play Rock-Paper-Scissors, and calculate how tall someone is in Ping-Pong balls –Create fun, playable games like War, Yahtzee, and Pong –Add interactivity, animation, and sound to their apps Teach Your Kids to Code is the perfect companion to any introductory programming class or after-school meet-up, or simply your educational efforts at home. Spend some fun, productive afternoons at the computer with your kids—you can all learn something!

Introduce children to the popular Python programming language through relatable examples and fun projects! Python has now surpassed Java as the most commonly used programming language. As the language rises in popularity, this complete guide can teach basic Python concepts to kids with its simple, friendly format. Bite-Size Python: An Introduction to Python Programming provides children with a foundation in the Python language. This unique book shares knowledge through easy-to-understand examples, fast exercises, and fun projects! As children learn, their parents, caregivers, and instructors can also join in their discoveries. Bite-Size Python is ideal for those who are new to programming, giving kids ages 9 and up a beginners' approach to learning one of the most important programming languages. Gives an overview of Python Provides exciting programming projects Offers instruction on how to download and install Python Presents key programming language concepts Simplifies technical definitions With this playful guide to learning Python, readers can try out activities on their computers for a hands-on learning experience. The artwork in Bite-Size Python represents children of various backgrounds, so any child who picks up this book will be empowered to learn and young readers will love showing their projects to friends and family!

Are you looking to start coding? Or teach kids how to code? This book on beginner Python coding can solve your problem. For the last couple of years, the news keeps talking about the digital economy and how everyone needs programmers. It seems like everyone wants to learn how to code. However, it is not that easy. Coding is a skill; and like any skill it takes time to learn. Like any skill, the younger you start; the better you get. From my personal experience with coding and also with teaching young kids how to code, let me tell you that coding is a lot of fun and extremely gratifying. It teaches you how to organize, think logically, communicate, work in teams and be more creative. However, programming can be hard to learn. Especially if you start reading advanced books. You need a step-by-step guide to get started. This book starts off with the very basics; how to install the Python software, set up and write your first lines of code. There are exercises at the end of each chapter that can test your new found knowledge and move you ahead. This kind of project based learning is great to get you moving and confident. Here is just a fraction of what's inside: Why Python over other Programming Languages? The best way to start - Python Programming for beginners The turtle graphics of your dreams - master the fastest way to create outstanding graphic images What are the most important functions of Python Language, and how to master them fast? Game programming - probably the most fascinating chapter for your kids to learn! What Python Coding Games are the easiest to create for beginners? How errors to avoid? Every upcoming Python Programmer should read this chapter! Much much more... So don't wait, scroll up, click on "Add to Cart" and Start Learning!

Explore MIndstorms and a robot's abilities deeper, from programming a series of movements to collecting and analyzing robot

data.

Learning Python just got fun for kids! Learning to code is just like playing a new sport or practicing an instrument--just get started! From the basic building blocks of programming to creating your very own code, this book teaches essential Python skills to kids ages 10 and up with 50 fun and engaging activities. Master fundamental functions, create code blocks, and draw and move shapes with the turtle module--these interactive lessons offer step-by-step guidance to make computer programming entertaining to future coders. You can even see the results of your coding in real time! With helpful hacks and screenshots for guidance, the only question that Coding for Kids: Python leaves unanswered is: what will you build next? Coding for Kids: Python includes: Game-based learning--Kids study coding concepts by putting them into practice with 50 innovative exercises. Creative projects--Coding for Kids: Python encourages kids to think independently, modify code, and express their creativity with every lesson. Easy-to-follow guidance--Straightforward directions and tips keep coders engaged every step of the way. Give the technologists of tomorrow the gift of fluently coding while having tons of fun with Coding for Kids: Python.

A fun, accessible guide to computers and coding for older children and curious adults. This fun and quirky book provides a fascinating introduction to the world of computer coding, organized into handy bite-sized chunks. Coding, now firmly part of the National Curriculum, is a huge subject and can seem slightly impenetrable, especially to parents, and that's where this book comes in. Cool Coding contains everything you need to know about computers and coding, from the very basics of binary code and how it works, to the myriad things that coding can actually do, to the brave new worlds of artificial intelligence, robots and cloud computing. It introduces the most popular coding programmes taught in schools, Scratch and Python, and shows how coding can be used to create websites, games and apps, and make robots and moving vehicles, with the help of nifty devices such as the Raspberry Pi. And if you've ever wondered what spaghetti code, duck typing, snakecase or The Internet of Things are, you'll find the answers here. Packed with playful illustrations and inspiring information on the amazing world of coding and computing, this book is the perfect introduction to this most essential of subjects.

Are you looking for a proven and secure career path for your kid? Maybe he or she is already interested in computer programming or just loves to use a computer for some free time activities? What about a book that would make you and your kid engage, have fun, and learn at the same time? If you answered "Yes" to at least one of these questions, then keep reading... LEARNING PROGRAMMING HAS NEVER BEEN EASIER!PROBABLY THE FASTEST WAY TO MASTER ONE OF THE MOST WIDELY USED CODING LANGUAGES IN THE WORLD... It is not a secret that the world is leading more and more towards science and technology, and the demand for IT and computer programming professionals are higher than ever before! What is the best way to start? I believe that mastering a powerful programming language is one of the best skills you could learn! Which one should you choose? My choice is definitely PYTHON - one of the most popular and widely used programming languages around the world! And it is not as difficult as it may sound... if you are already in computer programming or know a thing or two about Python, you know what I am talking about... If presented correctly, even Your Kids Can Easily Learn It! As young as 7 or 8 years old, sometimes even younger! Inside this book, you'll find a perfect introduction to Python Programming that will make your kid excited every time he or she sits down in from of the computer. Not to play games - but to learn! Here is just a fraction of what's inside: Why Python over other Programming Languages? The best way to start - Python Programming for beginners The turtle graphics of your dreams - master the fastest way to create outstanding graphic images What are the most important functions of Python Language, and how to master them fast? Game programming - probably the most fascinating chapter for your kids to learn! What Python Coding Games are the easiest to create for beginners? How errors to avoid? Every upcoming Python Programmer should read this chapter! Much much more... And keep in mind that with this book, you don't have to have any previous coding or programming experience. Whether it is going to be a gift for your kid or you want to master Python Programming Language yourself, this book will definitely help you build a strong foundation for this huge career opportunity! So don't wait, scroll up, click on "Buy Now" and Start Learning!

When they feel more confident, kids can think creatively and use the tips and tricks provided to personalize and adapt each project. Coding for kids Python is a simple, fun and efficient introduction to introduce your children to learning coding and to develop the ability, to think creatively, work collaboratively and think independently. This book is written in an intuitive way and teaches step by step, the essential programming basics with 32 exciting fun and illustrated projects, loops and conditionals, secret code coding, several quizzes to challenge family and friends, games and more. Kids will eventually have the skills to build whatever kind of project they can dream up - the only limit is your imagination! The perfect next step to the book coding with scratch, which can take your children to a more advanced level of coding in an easy way, thanks to a very intuitive writing that simply conveys all the necessary notions to learn how to program. Coding Projects in Python is the second of a brilliant new series of programming books. Complete your collection with Coding for Kids Scratch!

Impractical Python Projects is a collection of fun and educational projects designed to entertain programmers while enhancing their Python skills. It picks up where the complete beginner books leave off, expanding on existing concepts and introducing new tools that you'll use every day. And to keep things interesting, each project includes a zany twist featuring historical incidents, pop culture references, and literary allusions. You'll flex your problem-solving skills and employ Python's many useful libraries to do things like: - Help James Bond crack a high-tech safe with a hill-climbing algorithm - Write haiku poems using Markov Chain Analysis - Use genetic algorithms to breed a race of gigantic rats - Crack the world's most successful military cipher using cryptanalysis - Derive the anagram, "I am Lord Voldemort" using linguistical sieves - Plan your parents' secure retirement with Monte Carlo simulation - Save the sorceress Zatanna from a stabby death using palingrams - Model the Milky Way and calculate our odds of detecting alien civilizations - Help the world's smartest woman win the Monty Hall problem argument - Reveal Jupiter's Great Red Spot using optical stacking - Save the head of Mary, Queen of Scots with steganography - Foil corporate security with invisible electronic ink Simulate volcanoes, map Mars, and more, all while gaining valuable experience using free modules like Tkinter, matplotlib, Cprofile, Pylint, Pygame, Pillow, and Python-Docx. Whether you're looking to pick up some new Python skills or just need a pick-me-up, you'll find endless educational, geeky fun with Impractical Python Projects.

Python is a powerful, expressive programming language that's easy to learn and fun to use! But books about learning to program in Python can be kind of dull, gray, and boring, and that's no fun for anyone. Python for Kids brings Python to life and brings you (and your parents) into the world of programming. The ever-patient Jason R. Briggs will guide you through the basics as you experiment with unique (and often hilarious) example programs that feature ravenous monsters, secret agents, thieving ravens, and more. New terms are defined; code is colored, dissected, and explained; and quirky, full-color illustrations keep things on the

lighter side. Chapters end with programming puzzles designed to stretch your brain and strengthen your understanding. By the end of the book you'll have programmed two complete games: a clone of the famous Pong and "Mr. Stick Man Races for the Exit"—a platform game with jumps, animation, and much more. As you strike out on your programming adventure, you'll learn how to: –Use fundamental data structures like lists, tuples, and maps –Organize and reuse your code with functions and modules –Use control structures like loops and conditional statements –Draw shapes and patterns with Python's turtle module –Create games, animations, and other graphical wonders with tkinter Why should serious adults have all the fun? Python for Kids is your ticket into the amazing world of computer programming. For kids ages 10+ (and their parents) The code in this book runs on almost anything: Windows, Mac, Linux, even an OLPC laptop or Raspberry Pi!

Python for Software Design is a concise introduction to software design using the Python programming language. The focus is on the programming process, with special emphasis on debugging. The book includes a wide range of exercises, from short examples to substantial projects, so that students have ample opportunity to practice each new concept.

Computer Coding Python for Kids has all you need to master Python - one of the world's most popular computer programming languages. Python is easier than other professional coding languages yet no less powerful. Computer Coding Python for Kids uses a hands-on approach to show it how works, with step-by-step projects that build knowledge gradually, from simple functions to building a space treasure game, kids will not only learn essential coding skills but have fun as they learn. Plus there are tips to personalise and adapt each project to encourage creative thinking. Just by following the steps and kids will be building crazy games and handy apps in no time.

The second edition of the best-selling Python book in the world (over 1 million copies sold!). A fast-paced, no-nonsense guide to programming in Python. Updated and thoroughly revised to reflect the latest in Python code and practices. Python Crash Course is the world's best-selling guide to the Python programming language. This fast-paced, thorough introduction to programming with Python will have you writing programs, solving problems, and making things that work in no time. In the first half of the book, you'll learn basic programming concepts, such as variables, lists, classes, and loops, and practice writing clean code with exercises for each topic. You'll also learn how to make your programs interactive and test your code safely before adding it to a project. In the second half, you'll put your new knowledge into practice with three substantial projects: a Space Invaders-inspired arcade game, a set of data visualizations with Python's handy libraries, and a simple web app you can deploy online. As you work through the book, you'll learn how to: • Use powerful Python libraries and tools, including Pygame, Matplotlib, Plotly, and Django • Make 2D games that respond to keypresses and mouse clicks, and that increase in difficulty • Use data to generate interactive visualizations • Create and customize web apps and deploy them safely online • Deal with mistakes and errors so you can solve your own programming problems If you've been thinking about digging into programming, Python Crash Course will get you writing real programs fast. Why wait any longer? Start your engines and code!

Build your own computer games with Scratch 3! Learn how to make fun games with Scratch--a free, beginner-friendly programming language from the MIT Media Lab. Create mazes, road-crossing games, and two-player games that keep score. Colorful pictures and easy-to-follow instructions show you how to add cool animations and sound effects to your games. You'll have hours of fun catching snowflakes, gobbling up tacos, and dodging donuts in space--while learning how to code along the way! Covers Scratch 3

This book is a tutorial for the Python 3 programming language designed for someone with no programming experience. Starting from no programming knowledge, the book teaches how to create programs with examples, explanations and exercises.

An indispensable collection of practical tips and real-world advice for tackling common Python problems and taking your code to the next level. Features interviews with high-profile Python developers who share their tips, tricks, best practices, and real-world advice gleaned from years of experience. Sharpen your Python skills as you dive deep into the Python programming language with Serious Python. You'll cover a range of advanced topics like multithreading and memorization, get advice from experts on things like designing APIs and dealing with databases, and learn Python internals to help you gain a deeper understanding of the language itself. Written for developers and experienced programmers, Serious Python brings together over 15 years of Python experience to teach you how to avoid common mistakes, write code more efficiently, and build better programs in less time. As you make your way through the book's extensive tutorials, you'll learn how to start a project and tackle topics like versioning, layouts, coding style, and automated checks. You'll learn how to package your software for distribution, optimize performance, use the right data structures, define functions efficiently, pick the right libraries, build future-proof programs, and optimize your programs down to the bytecode. You'll also learn how to: - Make and use effective decorators and methods, including abstract, static, and class methods - Employ Python for functional programming using generators, pure functions, and functional functions - Extend flake8 to work with the abstract syntax tree (AST) to introduce more sophisticated automatic checks into your programs - Apply dynamic performance analysis to identify bottlenecks in your code - Work with relational databases and effectively manage and stream data with PostgreSQL If you've been looking for a way to take your Python skills from good to great, Serious Python will help you get there. Learn from the experts and get seriously good at Python with Serious Python!

Learn how to code in Python by building and playing your own computer games, from mind-bending brainteasers to crazy action games with explosive sound effects and 3D graphics. Whether you're a seasoned programmer or a beginner hoping to learn Python, you'll find Computer Coding Python Games for Kidsfun to read and easy to follow. Each chapter shows how to construct a complete working game in simple numbered steps. Using freely available resources, such as PyGame Zero and Blender, you can add animations, music, scrolling backgrounds, 3D scenery, and other exciting professional touches. After building the game, find out how to adapt it to create your own personalised version with secret hacks and cheat codes! Along the way, you'll master the key concepts that programmers need to write code - not just in Python but in all programming languages. Find out what bugs, loops, flags, strings, tuples, toggles, and turtles are. Learn how to plan and design the ultimate game - and then play it to destruction as you test and debug it. Before you know it, you'll be a coding genius!

Teach kids the concepts of coding in easy-to-understand language and help them develop games of their own with The Everything Kids' Scratch Coding Book! Understanding computer science is becoming a necessity in the modern age. As our world shifts towards becoming increasingly more technical and automated, the ability to code and understand computers has become one of the most valuable skills any child can have on the road to a successful life. More and more schools are recognizing this importance and have started to implement computer science and coding as core elements in their curriculums, right alongside math and history. The Everything Kids' Scratch Coding Book helps children get a head start on this new essential skill, with

Scratch coding—a language designed by MIT specifically to help a younger audience learn to code. In no time, children will learn basic coding concepts, build fun games, and get a competitive edge on their classmates. This book encourages children to think analytically and problem-solve, while helping them develop an essential skill that will last them a lifetime.

Teach kids as young as 5 years old the basic programming skills necessary to code, including sequencing and loops, without a computer. It's never too early to learn computer coding. My First Coding Book is a playful introduction to offline coding and programming that will give young children a head start. Filled with puzzles, mazes, and games to teach the basic concepts of sequences, algorithms, and debugging, this book will help children develop critical thinking, logic, and other skills to cement lifelong computer literacy, which is extremely valuable and sought-after in today's world. With its unique approach and colorful and creative imagery, My First Coding Book makes learning and fun one and the same and will have children playing their way to programming proficiency. Supporting STEM education initiatives, computer coding teaches kids how to think creatively, work collaboratively, and reason systematically, and is quickly becoming a necessary and sought-after skill. DK's computer coding books are full of fun exercises with step-by-step guidance, making them the perfect introductory tools for building vital skills in computer programming.

Apple's Swift is a powerful, beginner-friendly programming language that anyone can use to make cool apps for the iPhone or iPad. In Coding iPhone Apps for Kids, you'll learn how to use Swift to write programs, even if you've never programmed before. You'll work in the Xcode playground, an interactive environment where you can play with your code and see the results of your work immediately! You'll learn the fundamentals of programming too, like how to store data in arrays, use conditional statements to make decisions, and create functions to organize your code—all with the help of clear and patient explanations. Once you master the basics, you'll build a birthday tracker app so that you won't forget anyone's birthday and a platform game called Schoolhouse Skateboarder with animation, jumps, and more! As you begin your programming adventure, you'll learn how to: –Build programs to save you time, like one that invites all of your friends to a party with just the click of a button! –Program a number-guessing game with loops to make the computer keep guessing until it gets the right answer –Make a real, playable game with graphics and sound effects using SpriteKit –Challenge players by speeding up your game and adding a high-score systemWhy should serious adults have all the fun? Coding iPhone Apps for Kids is your ticket to the exciting world of computer programming. Covers Swift 3.x and Xcode 8.x. Requires OS X 10.11 or higher.

Presents a guide for beginners on the fundamentals of computer programming using the Python language.

Don't just play computer games - help children build them with your own home computer! Calling all coders, this is a straightforward, visual guide to helping kids understand the basics of computer coding using Scratch and Python coding languages. Essential coding concepts like scripts, variables, and strings are explained using build-along projects and games. Kids can create online games to play like Monkey Mayhem and Bubble Blaster, draw mazes and shapes, build animations, and more using the step-by-step examples to follow and customize. Seven projects let kids (and their parents) practice the skills as they are learning in each section of the book. Kids get instant results, even when completely new to coding. Packed with visual examples, expert tips, a glossary of key terms, and extras such as profiles of famous coders, Help Your Kids with Computer Coding lays a hands-on foundation for computer programming, so adults and kids can learn together. Supporting STEM education initiatives, computer coding teaches kids how to think creatively, work collaboratively, and reason systematically, and is quickly becoming a necessary and sought-after skill. DK's computer coding books are full of fun exercises with step-by-step guidance, making them the perfect introductory tools for building vital skills in computer programming. User note: At home, all you need is a desktop or laptop with Adobe 10.2 or later, and an internet connection to download Scratch 2.0 and Python 3. Coding with Scratch can be done without download on https: //scratch.mit.edu. Series Overview: DK's bestselling Help Your Kids With series contains crystal-clear visual breakdowns of important subjects. Simple graphics and jargon-free text are key to making this series a user-friendly resource for frustrated parents who want to help their children get the most out of school.

Ever use that free calculator application on your computer? Probably, but chances are it was such an unmemorable experience that you couldn't say for sure whether you have or not. What if that calculator knew your name? What if it carried on a conversation with you, and asked you questions? You'd probably remember it a little better! Maybe even make a point of using it whenever you needed to crack an equation! Java is a very powerful, yet easy to learn language. It's absolutely FREE and it's EVERYWHERE - on your phone, on your computer, and on many other devices all around you every day, and in "Java Programming for Kids: Learn Java Step By Step and Build Your Own Interactive Calculator for Fun!" bestselling author R. Chandler Thompson will start you on your path as a Java programmer!

Get comfortable with Python, the most popular programming language used right now in machine learning and data science. This book is the perfect blend of education and fun for kids 8 years and above looking to learn one of the easiest languages to develop programs with, most everything from websites to desktop apps to games to AI. It will include 4 big projects (or capstone projects): 3 games with Turtle, Tkinter and Pygame and a desktop app with Tkinter The book starts with an overview of basic programming concepts such as variables, numbers and strings, while creating fun, personalized mini projects like "Print your Name" and "Is your mom tipping enough". It then dives right into Turtle, a Python library custom-made for kids, where they'll learn how to draw, animate, automate and eventually make colorful mini projects based on the Python concepts learned. Once they have built a foundation in programming and the Python language, they will learn all about building desktop apps with Tkinter and games with Pygame. There is also an entire chapter dedicated to more fun puzzles and activities that come with a step-by-step solution, and another chapter with cool ideas for more puzzles and a section that gives them advice on where they can go from there. By the end of this book, kids will learn Python from the inside-out while creating projects that they can showcase. They will develop problem-solving skills along with programming skills while doing the puzzles and activities described in the book. What You'll Learn Gain a gentle, but thorough introduction into the world of programming and Python Create programs and solve problems with core Python concepts Build mini projects and capstone projects (showcase worthy) with Turtle, Tkinter an Pygame Develop programming skills while doing the puzzles and activities described in the book Who This Book Is For Kids 8 years and above.

A hands-on introduction to coding that teaches you how to program bots to do cool things in the game you love--Minecraft! This book takes the robotic "turtle" method, and extends it to the 3D, interactive world of Minecraft. You've mined for diamonds, crafted dozens of tools, and built all sorts of structures--but what if you could program robots to do all of that for you in a fraction of the time? In Coding with Minecraft®, you'll create a virtual robot army with Lua, a programming language used by professional game developers. Step-by-step coding projects will show you how to write programs that automatically dig mines, collect materials, craft items, and build anything that you can imagine. Along

the way, you'll explore key computer science concepts like data types, functions, variables, and more. Learn how to: - Program robots that make smart decisions with flow control - Reuse code so that your robots can farm any crop you want, including wheat, sugar cane, and even cacti! - Program a factory that generates infinite building supplies - Design an algorithm for creating walls and buildings of any size - Code yourself a pickaxe-swinging robotic lumberjack! - Create a robot that digs mine shafts with stairs so you can explore safely Bonus activities in each chapter will help you take your coding skills to the next level. By the end of the book, you'll understand how powerful coding can be and have plenty of robots at your beck and call.

Summary A fun and imaginative way for kids and other beginners to take their first steps programming on a Raspberry Pi. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology The Raspberry Pi is a small, low-cost computer invented to encourage experimentation. The Pi is a snap to set up, and using the free Python programming language, you can learn to create video games, control robots, and maybe even write programs to do your math homework! About the Book Hello Raspberry Pi! is a fun way for kids to take their first steps programming on a Raspberry Pi. First, you discover how to set up and navigate the Pi. Next, begin Python programming by learning basic concepts with engaging challenges and games. This book gives you an introduction to computer programming as you gain the confidence to explore, learn, and create on your own. The last part of the book introduces you to the world of computer control of physical objects, where you create interactive projects with lights, buttons, and sounds. What's Inside Learn Python with fun examples Write games and control electronics Use Pygame for video game sounds and graphics Loaded with programming exercises About the Reader To use this book, you'll need a Raspberry Pi starter kit, keyboard, mouse, and monitor. No programming experience needed. Table of Contents PART 1 GETTING STARTED 1 Meet Raspberry Pi Exploring Python PART 2 PLAYING WITH PYTHON Silly Sentence Generator 3000: creating interactive programs Norwegian Blue parrot game: adding logic to programs Raspi's Cave Adventure PART 3 PI AND PYTHON PROJECTS Blinky Pi Light Up Guessing Game DJ Raspi APPENDIXES Raspberry Pi troubleshooting Raspberry Pi ports and legacy boards Solutions to chapter challenges Raspberry Pi projects

JavaScript is the programming language of the Internet, the secret sauce that makes the Web awesome, your favorite sites interactive, and online games fun! JavaScript for Kids is a lighthearted introduction that teaches programming essentials through patient, step-by-step examples paired with funny illustrations. You'll begin with the basics, like working with strings, arrays, and loops, and then move on to more advanced topics, like building interactivity with jQuery and drawing graphics with Canvas. Along the way, you'll write games such as Find the Buried Treasure, Hangman, and Snake. You'll also learn how to: –Create functions to organize and reuse your code –Write and modify HTML to create dynamic web pages –Use the DOM and jQuery to make your web pages react to user input –Use the Canvas element to draw and animate graphics –Program real user-controlled games with collision detection and score keeping With visual examples like bouncing balls, animated bees, and racing cars, you can really see what you're programming. Each chapter builds on the last, and programming challenges at the end of each chapter will stretch your brain and inspire your own amazing programs. Make something cool with JavaScript today! Ages 10+ (and their parents!)

Learn to use the Python language to create programs of all kinds. Author Jason Cannon will guide you from complete unfamiliarity with Python to creating practical applications. With Python, lack of experience isn't an obstacle to programming language mastery. This updated and expanded second edition of Book provides a user-friendly introduction to the subject, Taking a clear structural framework, it guides the reader through the subject's core elements. A flowing writing style combines with the use of illustrations and diagrams throughout the text to ensure the reader understands even the most complex of concepts. This succinct and enlightening overview is a required reading for all those interested in the subject . We hope you find this book useful in shaping your future career & Business.

Python is a powerful, expressive programming language that's easy to learn and fun to use! But books about learning to program in Python can be kind of dull, gray, and boring, and that's no fun for anyone.Python for Kids brings Python to life and brings you (and your parents) into the world of programming. The ever-patient Jason R. Briggs will guide you through the basics as you experiment with unique (and often hilarious) example programs that feature ravenous monsters, secret agents, thieving ravens, and more. New terms are defined; code is colored, dissected, and explained; and quirky, full-color illustrations keep things on the lighter side.Chapters end with programming puzzles designed to stretch your brain and strengthen your understanding. By the end of the book you'll have programmed two complete games: a clone of the famous Pong and "Mr. Stick Man Races for the Exit"--a platform game with jumps, animation, and much more.As you strike out on your programming adventure, you'll learn how to:-Use fundamental data structures like lists, tuples, and maps-Organize and reuse your code with functions and modules-Use control structures like loops and conditional statements-Draw shapes and patterns with Python's turtle module-Create games, animations, and other graphical wonders with tkinterWhy should serious adults have all the fun? Python for Kids is your ticket into the amazing world of computer programming.For kids ages 10+ (and their parents)

Learn how to use sensors to control a robot's movements in Mindstorms, from following lines to recognizing obstacles.

Python for KidsA Playful Introduction To ProgrammingNo Starch Press

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