Computer Systems A Programmer39s Perspective 2nd Edition Solutions Manual

The practicing programmer's DEITEL® guide to C# and the powerful Microsoft .NET Framework Written for programmers with a background in C++, Java, or other high-level languages, this book applies the Deitel signature live-code approach to teaching programming and explores Microsoft's C# language and the new .NET 2.0 in depth. The book is updated for Visual Studio® 2005 and C# 2.0, and presents C# concepts in the context of fully tested programs, complete with syntax shading, detailed line-by-line code descriptions, and program outputs. The book features 200+ C# applications with 16,000+ lines of proven C# code, as well as 300+ programming tips that will help you build robust applications. Start with a concise introduction to C# fundamentals using an early classes and objects approach, then rapidly move on to more advanced topics, including multithreading, XML, ADO.NET 2.0, ASP.NET 2.0, Web services, network programming, and .NET remoting. Along the way you will enjoy the Deitels' classic treatment of object-oriented programming and a new, OOD/UML™ ATM case study, including a complete C# implementation. When you are finished, you will have everything you need to build next-generation Windows applications, Web applications, and Web services. Dr. Harvey M. Deitel and Paul J. Deitel are the founders of Deitel & Associates, Inc., the internationally recognized programming languages content-creation and corporate-training organization. Together with their colleagues at Deitel & Associates, Inc., they have written many international best-selling programming languages textbooks that millions of people worldwide have used to master C, C++, Java™, C#, XML, Visual Basic®, Perl, Python, and Internet and Web programming. The DEITEL® Developer Series is designed for practicing programmers. The series presents focused treatments of emerging technologies, including .NET, J2EE, Web services, and more. Practical, Example-Rich Coverage Of: C# 2.0, .NET 2.0, FCL ASP.NET 2.0, Web Forms and Controls Database, SQL, and ADO.NET 2.0 Networking and .NET Remoting XML, Web Services Generics, Collections GUI/Windows® Forms OOP: Classes, Inheritance, and Polymorphism OOD/UML™ ATM Case Study Graphics and Multimedia Multithreading Exception Handling And more... VISIT WWW.DEITEL.COM Download code examples To receive updates on this book, subscribe to the free DEITEL® BUZZ ONLINE e-mail newsletter at www.deitel.com/newsletter/subscribe.html Read archived Issues of the DEITEL® BUZZ ONLINE Get corporate training information

With her gift for mixing sparkling humor with moments of true-to-life poignancy, the acclaimed author of "The Wife of Reilly" delivers a character-rich novel about following one's impulses, embracing change, and finally taking a chance on love.

The C++11 standard allows programmers to express ideas more clearly, simply, and directly, and to write faster, more efficient code. Bjarne Stroustrup, the designer and original implementer of C++, thoroughly covers the details of this language and its use in his definitive reference, The C++ Programming Language, Fourth Edition. In A Tour of C++ , Stroustrup excerpts the overview chapters from that complete reference, expanding and enhancing them to give an experienced programmer–in just a few hours–a clear idea of what constitutes modern C++. In this concise, self-contained guide, Stroustrup covers most major language features and the major standard-library components–not, of course, in great depth, but to a level that gives programmers a meaningful overview of the language, some key examples, and practical help in getting started. Stroustrup presents the C++ features in the context of the programming styles they support, such as object-oriented and generic programming. His tour is remarkably comprehensive. Coverage begins with the basics, then ranges widely through more advanced topics, including many that are new in C++11, such as move semantics, uniform initialization, lambda expressions, improved containers, random numbers, and concurrency. The tour ends with a discussion of the design and evolution of C++ and the extensions added for C++11. This guide does not aim to teach you how to program (see Stroustrup's Programming: Principles and Practice Using C++ for that); nor will it be the only resource you'll need for C++ mastery (see Stroustrup's The C++ Programming Language, Fourth Edition, for that). If, however, you are a C or C++ programmer wanting greater familiarity with the current C++ language, or a programmer versed in another language wishing to gain an accurate picture of the nature and benefits of modern C++, you can't find a shorter or simpler introduction than this tour provides.

London's most notorious rogue—decadent, depraved, forbidden The ladies of the ton won't stop whispering about deliciously wicked Jack Dodger—once a thieving street urchin, now the wealthy owner of London's most exclusive gentleman's club. There's no pleasure he hasn't enjoyed, no debauchery the handsome scoundrel won't provide for the lords who flock to his house of carnal intrigue. London's most virtuous lady—honorable, uncorrupted, and all too human Olivia, Duchess of Lovingdon, would never associate with such a rogue. So when Jack is named sole heir to the duke's personal possessions, the beautiful, well-bred lady is outraged. Now, Olivia is forced to share her beloved home with this despicable man. Caught between the devil and desire But Olivia's icy disdain is no match for Jack's dangerous charm. His touch awakens desire. His kiss demands surrender. She will struggle to bar Jack from her heart . . . but her body, coveting divine release, will not let her bar him from her bed.

Shaping China's Innovation Future employs a thorough analysis of a combination of factors including: the role of law and China's legal system; economic theory and the development of China's economy; China's educational, intellectual property, and financial systems; China's innovation capacity; and Chinese culture. Though the recommendations on how to improve China's technology commercialization system are unique to China, the scope of the research makes the conclusions found here applicable to other countries facing similar challenges.

In Math for Programmers you'll explore important mathematical concepts through hands-on coding. Filled with graphics and more than 300 exercises and mini-projects, this book unlocks the door to interesting–and lucrative!–careers in some of today's hottest fields. As you tackle the basics of linear algebra, calculus, and machine learning, you'll master the key Python libraries used to turn them into real-world software applications. Summary To score a job in data science, machine learning, computer graphics, and cryptography, you need to bring strong math skills to the party. Math for Programmers teaches the math you need for these hot careers, concentrating on what you need to know as a developer. Filled with lots of helpful graphics and more than 200 exercises and mini-projects, this book unlocks the door to interesting–and lucrative!–careers in some of today's hottest programming fields. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Skip the mathematical jargon: This one-of-a-kind book uses Python to teach the math you need to build games, simulations, 3D graphics, and machine learning algorithms. Discover how algebra and calculus come alive when you see them in code! About the book In Math for Programmers

you'll explore important mathematical concepts through hands-on coding. Filled with graphics and more than 300 exercises and mini-projects, this book unlocks the door to interesting–and lucrative!–careers in some of today's hottest fields. As you tackle the basics of linear algebra, calculus, and machine learning, you'll master the key Python libraries used to turn them into real-world software applications. What's inside Vector geometry for computer graphics Matrices and linear transformations Core concepts from calculus Simulation and optimization Image and audio processing Machine learning algorithms for regression and classification About the reader For programmers with basic skills in algebra. About the author Paul Orland is a programmer, software entrepreneur, and math enthusiast. He is co-founder of Tachyus, a start-up building predictive analytics software for the energy industry. You can find him online at www.paulor.land. Table of Contents 1 Learning math with code PART I - VECTORS AND GRAPHICS 2 Drawing with 2D vectors 3 Ascending to the 3D world 4 Transforming vectors and graphics 5 Computing transformations with matrices 6 Generalizing to higher dimensions 7 Solving systems of linear equations PART 2 - CALCULUS AND PHYSICAL SIMULATION 8 Understanding rates of change 9 Simulating moving objects 10 Working with symbolic expressions 11 Simulating force fields 12 Optimizing a physical system 13 Analyzing sound waves with a Fourier series PART 3 - MACHINE LEARNING APPLICATIONS 14 Fitting functions to data 15 Classifying data with logistic regression 16 Training neural networks

Despite using them every day, most software engineers know little about how programming languages are designed and implemented. For many, their only experience with that corner of computer science was a terrifying "compilers" class that they suffered through in undergrad and tried to blot from their memory as soon as they had scribbled their last NFA to DFA conversion on the final exam. That fearsome reputation belies a field that is rich with useful techniques and not so difficult as some of its practitioners might have you believe. A better understanding of how programming languages are built will make you a stronger software engineer and teach you concepts and data structures you'll use the rest of your coding days. You might even have fun. This book teaches you everything you need to know to implement a full-featured, efficient scripting language. You'll learn both high-level concepts around parsing and semantics and gritty details like bytecode representation and garbage collection. Your brain will light up with new ideas, and your hands will get dirty and calloused. Starting from main(), you will build a language that features rich syntax, dynamic typing, garbage collection, lexical scope, first-class functions, closures, classes, and inheritance. All packed into a few thousand lines of clean, fast code that you thoroughly understand because you wrote each one yourself.

What is the special role of the deacon in the Church today? How can a deacon cultivate a spirituality appropriate to that role? Author Phyllis Zagano offers an approachable introduction to a theology and spirituality for today's deacon.

The Best-Selling C++ Resource Now Updated for C++11 The C++ standard library provides a set of common classes and interfaces that greatly extend the core C++ language. The library, however, is not self-explanatory. To make full use of its components–and to benefit from their power–you need a resource that does far more than list the classes and their functions. The C++ Standard Library: A Tutorial and Reference, Second Edition, describes this library as now incorporated into the new ANSI/ISO C++ language standard (C++11). The book provides comprehensive documentation of each library component, including an introduction to its purpose and design; clearly written explanations of complex concepts; the practical programming details needed for effective use; traps and pitfalls; the exact signature and definition of the most important classes and functions; and numerous examples of working code. The book focuses in particular on the Standard Template Library (STL), examining containers, iterators, function objects, and STL algorithms. The book covers all the new C++11 library components, including Concurrency Fractional arithmetic Clocks and timers Tuples New STL containers New STL algorithms New smart pointers New locale facets Random numbers and distributions Type traits and utilities Regular expressions The book also examines the new C++ programming style and its effect on the standard library, including lambdas, range-based for loops, move semantics, and variadic templates. An accompanying Web site, including source code, can be found at www.cppstdlib.com.

The Companion Guide for Lies Women Believe is made up of ten sessions and is designed for individuals and small groups. Each chapter includes the following features: -In a Nutshell--gives you an overview of the chapter to be studied from Lies Women Believe and reminds you of the lies discussed within that chapter. -Exploring the Truth--offers a daily personal study for you to complete during the course of the week between your small group meetings. Each day's study includes a few pages to read from Lies Women Believe and then questions to answer under the subtitles "Realize," "Reflect," and "Respond." -Walking Together in the Truth--provides questions to be discussed when your small group meets. Now there is a resource that will help you go deeper with the truths from Nancy's best-selling book Lies Women Believe. These penetrating questions will make you and your friends think and wrestle with the Truth as you search the Bible for answers to tough issues. Truth is not just something to know but something to live out in the laboratory of life as you apply the Word to real-life situations. The Companion Guide for Lies Women Believe is ideal for small groups, Bible Studies, and Sunday school classes.

For Computer Systems, Computer Organization and Architecture courses in CS, EE, and ECE departments. Few students studying computer science or computer engineering will ever have the opportunity to build a computer system. On the other hand, most students will be required to use and program computers on a near daily basis. Computer Systems: A Programmer's Perspective introduces the important and enduring concepts that underlie computer systems by showing how these ideas affect the correctness, performance, and utility of application programs. The text's hands-on approach (including a comprehensive set of labs) helps students understand the under-the-hood operation of a modern computer system and prepares them for future courses in systems topics such as compilers, computer architecture, operating systems, and networking.

When Michiel Steyn returns to the family farmstead in South Africa for his mother's funeral, he has spent close to half his lifetime abroad. But even after 15 years' absence, neither Michiel nor those left behind have truly come to terms with his terrible flight from the farm they called Paradise.

This title describes the state of the art in all areas of spatial marketing, discussing the various constituents which make up the geography of markets. Demand varies according to location and can be measured according to revenue, the number of households, spending patterns and lifestyles. Supply is also dependent on position, because prices, services, products and available shops rely on location, while the difference between supply and demand is the rationale for the role of the trader. The book also covers the way geographic techniques help to solve marketing problems and contains chapters written by contributors with extensive experience in this field; given that it is crucial for companies to direct their marketing correctly at their target audience, this will be indispensable reading for those involved in this area.

A 23-year-old African Caribbean woman presents in the emergency department with an acute onset facial rash. During initial assessment she complains of a two week history of general malaise, fatigue, fever, and weight loss. You have been assigned her examination...100 Cases in Dermatology presents 100 scenarios with a dermatological manifestation co

An astoundingly clear adaptation of Tanya, one of the most influential works of Jewish spiritual thought ever written, penned by Chasidic Rebbe, Rabbi Shneur Zalman of Liadi (1745-1812).

Explains how to use the portable electronic device to make and receive phone calls, set up iTunes and the iPod, take and organize photographs, send and receive e-mail and instant messages, browse the Internet, and play podcasts, music, video, and photograph slideshows.

Drawing on an impressive roster of experts in the field, Fundamentals of Computer Graphics, Fourth Edition offers an ideal resource for computer course curricula as well as a user-friendly personal or professional reference. Focusing on geometric intuition, the book gives the necessary information for understanding how images get onto the screen by using the complementary approaches of ray tracing and rasterization. It covers topics common to an introductory course, such as sampling theory, texture mapping, spatial data structure, and splines. It also includes a number of contributed chapters from authors known for their expertise and clear way of explaining concepts. Highlights of the Fourth Edition Include: Updated coverage of existing topics Major updates and improvements to several chapters, including texture mapping, graphics hardware, signal processing, and data structures A text now printed entirely in four-color to enhance illustrative figures of concepts The fourth edition of Fundamentals of Computer Graphics continues to provide an outstanding and comprehensive introduction to basic computer graphic technology and theory. It retains an informal and intuitive style while improving precision, consistency, and completeness of material, allowing aspiring and experienced graphics programmers to better understand and apply foundational principles to the development of efficient code in creating film, game, or web designs. Key Features Provides a thorough treatment of basic and advanced topics in current graphics algorithms Explains core principles intuitively, with numerous examples and pseudo-code Gives updated coverage of the graphics pipeline, signal processing, texture mapping, graphics hardware, reflection models, and curves and surfaces Uses color images to give more illustrative power to concepts

There is a new powerful and gentle approach to overcoming life's problems. Experience the accounts of people whose lives have been changed and whose dreams became realities by tapping their own inner power to change with neurolinguistic programming. NLP offers techniques for a wide range of problems including unwanted habits, guilt, grief, weight loss, abuse criticism, shame, stage fright and phobias. NLP also offers ways to enhance self-esteem, improve relationships, become more independent, create positive motivation, eliminate allergic responses, and promote self-healing.--From publisher description.

Begin your programming journey with C++ including the C++20 standard. You'll start with the basics and progress through step-by-step examples to become a working C++ programmer. This book will include new features like parallelism, coroutines, modules, networking, ranges, and reflections. All you need are Beginning C++20 and any recent C++ compiler and you'll soon be writing real C++ programs. There is no assumption of prior programming knowledge. All language concepts that are explained in the book are illustrated with working program examples, and all chapters include exercises for you to test and practice your knowledge. Free source code downloads are provided for all examples from the text and solutions to the exercises. This latest edition has been fully updated to the latest version of the language, C++20, and to all conventions and best practices of modern C++. Beginning C++20 also introduces the elements of the C++ Standard Library that provide essential support for the C++20 language. What You Will Learn Begin programming with C++20 standard Carry out modular programming in C++ Work with arrays and loops, pointers and references, strings, and more Write your own functions, types, and operators Discover the essentials of object-oriented programming Use overloading, inheritance, virtual functions, and polymorphism Write generic function templates and class templates Use coroutines, parallelism, ranges, auto type declarations, move semantics, lambda expressions, and much more Who This Book Is For Programmers new to C++ and those who may be looking for a refresh primer on C++ in general.

This book is about digital system testing and testable design. The concepts of testing and testability are treated together with digital design practices and methodologies. The book uses Verilog models and testbenches for implementing and explaining fault simulation and test generation algorithms. Extensive use of Verilog and Verilog PLI for test applications is what distinguishes this book from other test and testability books. Verilog eliminates ambiguities in test algorithms and BIST and DFT hardware architectures, and it clearly describes the architecture of the testability hardware and its test sessions. Describing many of the on-chip decompression algorithms in Verilog helps to evaluate these algorithms in terms of hardware overhead and timing, and thus feasibility of using them for System-on-Chip designs. Extensive use of testbenches and testbench development techniques is another unique feature of this book. Using PLI in developing testbenches and virtual testers provides a powerful programming tool, interfaced with hardware described in Verilog. This mixed hardware/software environment facilitates description of complex test programs and test strategies.

Romeo and Juliet never had to worry about being skinned alive.Sydney Skeller's father is spitting bullets over her reluctance to join the family business as a shifter hunter. The last thing Daddy needs to know is why—she yearns for a lover who's man enough for a relationship but animal enough to give her the wild ride of her dreams. After a treadmill mishap lands her in a tangled heap with Jason Cannon, she wonders if she's finally found her beast, er, man. One session in bed and one bite later, she's sure. Now if only she can keep her father from mounting Jason's

head on a wall…Jason is all man on the surface, but wolf shifter down to the bone. He's more than ready to stop "playing the pack" and find his one true mate, and Sydney of the luscious curves is the woman of his dreams. Finding out that she comes from a family sworn to eradicate his kind isn't a deal-breaker. But her outrageous plan for him to masquerade as the wolf in hunter's clothing, right under her father's very nose, could be asking more than he ever expected to give.Warning: Readers, be aware of stranger side effects. These side effects may include but aren't limited to the following: biting strangers, asking furry strangers to bite you, purposely falling off treadmills to collide with handsome strangers, enjoying hot sex with wild strangers, and baying at the moon to meet other moon-influenced strangers. If you notice any of these side effects, contact the author immediately. You may be the heroine of her next book!

Modern C++ Programming Cookbook, Second Edition steps up your C++ knowledge by deep-diving into the most important language and library features, including containers, algorithms, regular expressions, threads, and more. This edition comes updated with new recipes on core C++20 features, including modules, concepts, and coroutines, and C++20 ...

Brace yourself for a fun challenge: build a photorealistic 3D renderer from scratch! In just a couple of weeks, build a ray tracer that renders beautiful scenes with shadows, reflections, refraction effects, and subjects composed of various graphics primitives: spheres, cubes, cylinders, triangles, and more. With each chapter, implement another piece of the puzzle and move the renderer forward. Use whichever language and environment you prefer, and do it entirely test-first, so you know it's correct.

eBook of FoxPro tutorial from https://www.livetolearn.in FoxPro 2.6 for DOS / Windows - List of Commands, Tutorial & Sample Programs Contents IntroductionFile ExtensionsList of 50 - Commands Quick ReferenceData Types in FoxProNumeric Functions in FoxProArray Functions in FoxProDate & Time Functions in FoxProString Functions in FoxProUsing DOS commands in FoxProCreating a ProgramInput and Output Statements in FoxProFunction ClauseFunction code & PurposeControl Structures in FoxProSample ProgramsFor more buy options, please visit : https://www.livetolearn.in/site/e-books/foxpro-quick-reference

Computer Graphics from Scratch demystifies the algorithms used in modern graphics software and guides beginners through building photorealistic 3D renders. Computer graphics programming books are often math-heavy and intimidating for newcomers. Not this one. Computer Graphics from Scratch takes a simpler approach by keeping the math to a minimum and focusing on only one aspect of computer graphics, 3D rendering. You'll build two complete, fully functional renderers: a raytracer, which simulates rays of light as they bounce off objects, and a rasterizer, which converts 3D models into 2D pixels. As you progress you'll learn how to create realistic reflections and shadows, and how to render a scene from any point of view. Pseudocode examples throughout make it easy to write your renderers in any language, and links to live JavaScript demos of each algorithm invite you to explore further on your own. Learn how to: • Use perspective projection to draw 3D objects on a 2D plane • Simulate the way rays of light interact with surfaces • Add mirror-like reflections and cast shadows to objects • Render a scene from any camera position using clipping planes • Use flat, Gouraud, and Phong shading to mimic real surface lighting • Paint texture details onto basic shapes to create realistic-looking objects Whether you're an aspiring graphics engineer or a novice programmer curious about how graphics algorithms work, Gabriel Gambetta's simple, clear explanations will quickly put computer graphics concepts and rendering techniques within your reach. All you need is basic coding knowledge and high school math. Computer Graphics from Scratch will cover the rest.

C++ High Performance, Second Edition enables you to measure and identify bottlenecks in the code and eradicate them to amplify your application's working speed without compromising the readability of your C++ codebase

My book C++20 is both: a tutorial and a reference for the C++20 standard. It teaches you C++20 and provides you with the details of this new thrilling C++ standard. The thrilling factor is mainly due to the big four of C++20. Concepts change the way we think and program templates. They are semantic categories for the template parameters. They enable you to express your intention directly in the type system. If something goes wrong, you get a clear error message. The new ranges library enables it to perform algorithms directly on the container, compose the algorithm with the pipe symbol, and apply them onto infinite data streams. Thanks to coroutines asynchronous programming in C++ becomes mainstream. Coroutines are the base for cooperative tasks, event loops, infinite data streams, or pipelines. Modules overcome the restrictions of header files. They promise a lot. For example, the separation of header and source files becomes as obsolete as the preprocessor. In the end, we have faster built time and an easier way to build packages. More Details on Leanpub: https://leanpub.com/c20 Source Code on GitHub: https://github.com/RainerGrimm/Cpp20

Designed to complement the Encore DVD software documentation, this full-color book begins with a brief description of the DVD specification, then introduces readers to DVD authoring concepts such as menu creation, timeline construction, navigation, transcoding, and disc mastering. Readers learn how to plan and manage projects, and how to master the workflows between Encore and other Adobe applications such as Photoshop, Premiere, and After Effects to create well-structured and engaging menus. The companion DVD contains documents for planning a DVD, tutorial projects, and a library of royalty free, customizable, templates.

In each chapter of this unique volume, an exemplary teacher collaborates with a prominent scholar to present real-world strategies for putting literacy research to work in grades 5–12. These lively dialogues tackle key questions in adolescent literacy, including issues of motivation, critical thinking skills, content-area writing, differentiated instruction, assessment, English language learning, and technology. Suggestions for incorporating adolescents' out-of-school literacies and working with reading specialists and coaches show how to build connections between the classroom and wider communities. In-depth portraits of challenges and successes in the classroom, practical instructional tips, and stimulating questions for reflection make the book a valuable resource for inservice and preservice teachers.

An approachable, hands-on guide to understanding how computers work, from low-level circuits to high-level code. How Computers Really Work is a hands-on guide to the computing ecosystem: everything from circuits to memory and clock signals, machine code, programming languages, operating systems, and the internet. But you won't just read about these concepts, you'll test your knowledge with exercises, and practice what you learn with 41 optional hands-on projects. Build digital circuits, craft a guessing game, convert decimal numbers to binary, examine virtual memory usage, run your own web server, and more. Explore concepts like how to: • Think like a software engineer as you use data to describe a real world concept • Use Ohm's and Kirchhoff's laws to analyze an electrical circuit • Think like a computer as you practice binary addition and execute a program in your mind, step-by-step The book's projects will have you translate your learning into action, as you: • Learn how to use a multimeter to measure resistance, current, and voltage • Build a half adder to see how logical operations in hardware can be combined to perform useful functions • Write a program in assembly language, then examine the resulting machine code • Learn to use a debugger, disassemble code, and hack a program to change its behavior without changing the source code • Use a port scanner to see which internet ports your computer has open • Run your own server and get a solid crash course on how the web works And since a picture is worth a thousand bytes, chapters are filled with detailed diagrams and illustrations to help clarify technical complexities. Requirements: The projects require a variety of hardware - electronics projects need a breadboard, power supply, and various circuit components; software projects are performed on a Raspberry Pi. Appendix B contains a complete list. Even if you skip the projects, the book's major concepts are clearly presented in the main text.

If you need to know it, it's in this book! The Princeton Review's Cracking the GED, 2013 Edition has been optimized for on-screen viewing with cross-linked questions, answers, and explanations, and includes: • A thorough review of all the subject matter most likely to appear on the test • 2 full-length GED practice exams • Detailed explanations for every question, including practice test questions • Expert advice on writing a top-scoring essay • Techniques like Backsolving and Process of Elimination to help you save time

Our journals and planners are great for popping in your bag or having in your workspace or desk at home to grab when that special little thought comes to you and ensure you get the things you think about done! Suitable to be used with most media, pencils, pens, felt tips, watercolours, pastels and perfect for creating collages and artwork ideas. 365 planners 2019 Large planner Including -Page per day -Notes section at front and back of planner

The professional programmer's Deitel® guide to Python® with introductory artificial intelligence case studies Written for programmers with a background in another high-level language, Python for Programmers uses hands-on instruction to teach today's most compelling, leading-edge computing technologies and programming in Python–one of the world's most popular and fastest-growing languages. Please read the Table of Contents diagram inside the front cover and the Preface for more details. In the context of 500+, real-world examples ranging from individual snippets to 40 large scripts and full implementation case studies, you'll use the interactive IPython interpreter with code in Jupyter Notebooks to quickly master the latest Python coding idioms. After covering Python Chapters 1-5 and a few key parts of Chapters 6-7, you'll be able to handle significant portions of the hands-on introductory AI case studies in Chapters 11-16, which are loaded with cool, powerful, contemporary examples. These include natural language processing, data mining Twitter® for sentiment analysis, cognitive computing with IBM® Watson™, supervised machine learning with classification and regression, unsupervised machine learning with clustering, computer vision through deep learning and convolutional neural networks, deep learning with recurrent neural networks, big data with Hadoop®, Spark™ and NoSQL databases, the Internet of Things and more. You'll also work directly or indirectly with cloud-based services, including Twitter, Google Translate™, IBM Watson, Microsoft® Azure®, OpenMapQuest, PubNub and more. Features 500+ hands-on, real-world, live-code examples from snippets to case studies IPython + code in Jupyter® Notebooks Library-focused: Uses Python Standard Library and data science libraries to accomplish significant tasks with minimal code Rich Python coverage: Control statements, functions, strings, files, JSON serialization, CSV, exceptions Procedural, functional-style and object-oriented programming Collections: Lists, tuples, dictionaries, sets, NumPy arrays, pandas Series & DataFrames Static, dynamic and interactive visualizations Data experiences with real-world datasets and data sources Intro to Data Science sections: AI, basic stats, simulation, animation, random variables, data wrangling, regression AI, big data and cloud data science case studies: NLP, data mining Twitter®, IBM® Watson™, machine learning, deep learning, computer vision, Hadoop®, Spark™, NoSQL, IoT Open-source libraries: NumPy, pandas, Matplotlib, Seaborn, Folium, SciPy, NLTK, TextBlob, spaCy, Textatistic, Tweepy, scikit-learn®, Keras and more Accompanying code examples are available here: http://ptgmedia.pearsoncmg.com/imprint_downloads/informit/bookreg/9780135224335/9780135224335_examples.zip. Register your product for convenient access to downloads, updates, and/or corrections as they become available. See inside book for more information.

Unlike some operating systems, Linux doesn't try to hide the important bits from you—it gives you full control of your computer. But to truly master Linux, you need to understand its internals, like how the system boots, how networking works, and what the kernel actually does. In this completely revised second edition of the perennial best seller How Linux Works, author Brian Ward makes the concepts behind Linux internals accessible to anyone curious about the inner workings of the operating system. Inside, you'll find the kind of knowledge that normally comes from years of experience doing things the hard way. You'll learn: –How Linux boots, from boot loaders to init implementations (systemd, Upstart, and System V) –How the kernel manages devices, device drivers, and processes –How networking, interfaces, firewalls, and servers work –How development tools work and relate to shared libraries –How to write effective shell scripts You'll also explore the kernel and examine key system tasks inside user space, including system calls, input and output, and filesystems. With its combination of background, theory, real-world examples, and patient explanations, How Linux Works will teach you what you need to know to solve pesky problems and take control of your operating system.

Each study guide chapter is comprised of a detailed chapter review, demonstration problems, true/false, multiple-choice, matching questions, and copmrehensive exercises. Solutions to study guide questions are provided.

A fast-paced, thorough introduction to modern C++ written for experienced programmers. After reading C++ Crash Course, you'll be proficient in the core language concepts, the C++ Standard Library, and the Boost Libraries. C++ is one of the most widely used languages for real-world software. In the hands of a knowledgeable programmer, C++ can produce small, efficient, and readable code that any programmer would be proud of. Designed for intermediate to advanced programmers, C++ Crash Course cuts through the weeds to get you straight to the core of C++17, the most modern revision of the ISO standard. Part 1 covers the core of the C++ language, where you'll learn about everything from types and functions, to the object life cycle and expressions. Part 2 introduces you to the C++ Standard Library and Boost Libraries, where you'll learn about all of the high-quality, fully-featured facilities available to you. You'll cover special utility classes, data structures, and algorithms, and learn how to manipulate file systems and build high-performance programs that communicate over networks. You'll learn all the major features of modern C++, including: • Fundamental types, reference types, and user-defined types • The object lifecycle including storage duration, memory management, exceptions, call stacks, and the RAII paradigm • Compile-time polymorphism with templates and run-time polymorphism with virtual classes • Advanced expressions, statements, and functions • Smart pointers, data structures, dates and times, numerics, and probability/statistics facilities • Containers, iterators, strings, and algorithms • Streams and files, concurrency, networking, and application development With well over 500 code samples and nearly 100 exercises, C++ Crash Course is sure to help you build a strong C++ foundation.

Discover everything you need to know about C++ in a logical progression of small lessons that you can work through as quickly or as slowly as you need. This book divides C++ up into bite-sized chunks that will help you learn the language one step at a time. Fully updated to include C++20, it assumes no familiarity with C++ or any other C-based language. Exploring C++20 acknowledges that C++ can be a complicated language, so rather than baffle you with complex chapters explaining functions, classes, and statements in isolation you'll focus on how to achieve results. By learning a little bit of this and a little of that you'll soon have amassed enough knowledge to be writing non-trivial programs and will have built a solid foundation of experience that puts those previously baffling concepts into context. In this fully-revised second edition of Exploring C++, you'll learn how to use the standard library early in the book. Next,

you'll work with operators, objects, and data-sources in increasingly realistic situations. Finally, you'll start putting the pieces together to create sophisticated programs of your own design confident that you've built a firm base of experience from which to grow. What You Will Learn Grasp the basics, including compound statements, modules, and more Work with custom types and see how to use them Write useful algorithms, functions, and more Apply your skills to projects that include a fixed-point numbers and body-mass index applications Carry out generic programming and apply it in a practical project Exploit multiple inheritance, traits/policies, overloaded functions, and metaprogramming Who This Book Is For Experienced programmers who may have little or no experience with C++ who want an accelerated learning guide to C++20 so they can hit the ground running.