C programming for beginers assignment

Cprogramming. com: How to Get Started with C++ Search Starting out Getting Started Tutorials Quizzes Getting Started with C/C++ Exactly How to Get Started with C/C++ Today Okay, let's cut to the chase–you want to learn to program in C/C++ and you want to know exactly what you should do, right now. ? Go here and follow our super-simple instructions on setting up a C/C++ compiler (A compiler will let you run the code you write) ? Start our C++ Tutorial (If you want to learn C, go here. Not sure? I suggest C++.) ?

If you're feeling overwhelmed, read The 5 Most Common Problems New Programmers Face–And How You Can Solve Them Once you've started that, I recommend ? Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs Tools What do I need? Compilers Editors Debuggers ? ? Resources Source Code Syntax Reference Snippets Links Directory Book Reviews Function Lookup ? ? Checking out our From C++ Beginner to C++ Expert book series. Reading 5 Ways to Learn Programming Faster Working through practice programming problems Quizzing yourself Keep up with the latest information by subscribing to cprogramming. om by Email or RSS Want more details, read the rest of this page. Questions What is C, What is C++, and What is the Difference? C is a programming language originally developed for developing the http://www. cprogramming. com/begin. html (1 of 5) [05-11-2011 09: 26: 54] Cprogramming. com: How to Get Started with C++ Programming FAQ Message Board Ask an Expert Email About Us Unix operating system. It is a low-level and powerful language, but it lacks many modern and useful constructs. C++ is a newer language, based on C, that adds many more modern programming language features that make it easier to program than C.

Basically, C++ maintains all aspects of the C language, while providing new features to programmers that make it easier to write useful and sophisticated programs. For example, C++ makes it easier to manage memory and adds several features to allow " object-oriented" programming and " generic" programming. Basically, it makes it easier for programmers to stop thinking about the nitty-gritty details of how the machine works and think about the problems they are trying to solve. So, what is C++ used for? C++ is a powerful general-purpose programming language. It can be used to create small programs or large applications.

It can be used to make CGI scripts or console-only DOS programs. C++ allows you to create programs to do almost anything you need to do. The creator of C++, Bjarne Stroustrup, has put together a partial list of applications written in C++. How do you learn C++? No special knowledge is needed to learn C++, and if you are an independent learner, you can probably learn C++ from online tutorials or from books. There are plenty of free tutorials online, including Cprogramming. com's C++ tutorial – one which requires no prior programming experience. You can also pick out programming books from our recommendations.

While reading a tutorial or a book, it is often helpful to type – not copy and paste (even if you can!) – the code into the compiler and run it. Typing it yourself will help you to get used to the typical typing errors that cause problems and it will force you to pay attention to the details of programming syntax. Typing your program will also familiarize you with the general structure of programs and with the use of common commands. After running an example program – and after making certain that you understand how it

works – you should experiment with it: play with the program and test your own ideas.

By seeing which modifications cause problems and which sections of the code are most important to the function of the program, you should learn quite a bit about programming. Try our C++ Beginner to C++ Expert recommended book series, a sixbook set designed to get you maximal information and help take you from beginner to C++ master. http://www. cprogramming. com/begin. html (2 of 5) [05-11-2011 09: 26: 54] Cprogramming. com: How to Get Started with C++ You may also want to read about The 5 Most Common Problems New Programmers Face–And How You Can Solve Them.

What do I need to start programming in C or C ++? In order to make usable programs in C or C++, you will need a compiler. A compiler converts source code – the actual instructions typed by the programmer – into an executable file. Numerous compilers are available for C and C++. Can you help me set up a compiler? Absolutely! For beginners, Code:: Blocks with MinGW is our recommended free and easy-to-use Windows compiler. For OS X, I recommend Apple XCode, and for Linux, g++. All of these links will help you get up and running and ready to start programming.

Do I need to know C to learn C++? No. C++ is a superset of C; (almost) anything you can do in C, you can do in C++. If you already know C, you will easily adapt to the object-oriented features of C++. If you don't know C, you will have to learn the syntax of C-style languages while learning C++, but you shouldn't have any conceptual difficulties. What's the point of learning

to program? What can I get out of it? Ah, a skeptic! You can get a lot of things out of programming. For one thing, it's just plain fun. You can read my opinion on the matter here: Why Learn to Program?

I want to make games in C++, what should I do? It may be a challenging road, but it is doable. This article has more information: so you want to be a game Programmer? When you've learned a bit of C++, don't miss Same Game – a Simple Game from Start to Finish which will teach you to create a game, starting from nothing and ending in a fully playable game. What does it take to learn to be a programmer? http://www. cprogramming. com/begin. html (3 of 5) [05-11-2011 09: 26: 54] Cprogramming. com: How to Get Started with C++ Great question! Here's an article about what it takes to be a programmer!

Do I need to know math to be a programmer? No! At least, not too much. Most of programming is about design and logical reasoning, not about being able to quickly perform arithmetic, or deeply understanding algebra or calculus. The carryover between math and programming are primarily around logical reasoning and precise thinking. Only if you want to program advanced 3D graphics engines, or do other specialized numerical programming will you need mathematical skill. How should I think about Program Design? Try Thinking about Programming – A Beginner's Guide Help, my program doesn't work!

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New Incentives and a Whole New Platform From The Intel AppUpSM developer program Intel AppUpSM is now accepting MeeGo apps and offering new incentives for developers. If you're interested in tablet and netbook development, check it out! MeeGo Gaining Momentum Learn about the latest updates on the MeeGo platform Discussion Articles ? ? Procedural Texture Generation Learn how to generate textures for height maps (by Perspective) Module Development for Game Design Read about a technique for making a modular framework for computer game design and then read the discussion. Searching Techniques Read about various techniques for searching and then read the discussion. Some of these articles originally appeared in Code Journal Back Issues ? ? ? ? ? March 11 Code Journal Feb. 20 Code Journal Feb. 5 Code Journal Jan. 22 Code Journal Jan. 8 Code Journal Join our mailing list to keep up with the latest news and updates about Cprogramming. com! http://www. cprogramming. com/articles. tml (2 of 3) [05-11-2011 09: 29: 38] C and C++ Programming Articles – Cprogramming. com Name Email Join Mailing List —-Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2005 Cprogramming. com. All rights reserved. http://www. cprogramming. com/articles. html (3 of 3) [05-11-2011 09: 29: 38] C/C++ Programming Practice Problems – Cprogramming. com Search Starting out Getting Started Tutorials Quizzes C and C++ Programming Practice Problems Many of these problems will also make for excellent C++ job interview preparation. Fill in the blank exercises are designed for true beginners, where a large portion of the code is already provided!

Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs Fill in the blank exercises Fill in the missing parts of the code to create a

working program that will accomplish the stated task. ? ? Tools What do I need? Compilers Editors Debuggers ? Array input and output Guessing game Calculator Basic Programming Challenges ? ? ? ? Temperature Converter – Celsius to Farenheit Count the number of lines in a file Determine the size of a file Find all permutations of a given input Resources Source Code Syntax Reference Snippets Links Directory Book Reviews Function Lookup Intermediate Programming Challenges ? ? ? ? ? Questions ? Factorial Challenge No, not finding X factorial… String Searching with ildcards Converting Decimal to Binary Computing Pascal's Triangle Print a linked-list in reverse order Implement an in-place linked list reversal Advanced Programming Challenges http://www. cprogramming. com/challenge. html (1 of 2) [05-11-2011 09: 30: 09] C/C++ Programming Practice Problems – Cprogramming. com Programming FAQ Message Board Ask an Expert Email About Us ? ? Efficiently find the Maximum Subarray Sum It's possible to do it faster than you might think… Write a self-printing program without file IO Join our mailing list to keep up with the latest news and updates about Cprogramming. com! Name Email Join Mailing List —-Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2006 Cprogramming. com.

All rights reserved. http://www. cprogramming. com/challenge. html (2 of 2) [05-11-2011 09: 30: 09] C/C++ Programming Tips and Tricks Search Starting out Getting Started Tutorials Quizzes Welcome to Cprogramming. com's repository or tips for programming in C and C++. Peruse the archives or add your own tips for others to use! Sort by clicking on any of the headers. Tip Solve Any Compiler Error Easily When optimizing code, focus on algorithms

first Be careful when storing pointers inside unions Unexpected struct behavior in Borlands Turbo C++ 3 High performance looping Safely using strncpy difference between int* p and int *p declaration use of ! perator Better coding style for comparison Modifying const variables Use const variables as function parameters when po Never do unary minus on sizeof Multiply rather than Divide Prefer pre-increment and pre-decrement Error handling for new Author Wajahat Karim Alex Allain singam kiran reddy Raza Sayed Rachana oliv29 Rating (votes) 3. 4808 (624) 3. 5166 (151) 3. 2538 (130) 3. 1494 (87) 3. 4167 (204) 3. 2700 (100) Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Tools What do I need? Compilers Editors Debuggers omprakash mishra 3. 4915 (293) mrinal jha nids Wiro Sableng beyonddc Vaibhav Reese Moore Karl Upesh Jindal 3. 1233 (146) 3. 5054 (184) 3. 0208 (96) 2. 9765 (85) 3. 3511 (94) 3. 5070 (142) 3. 0333 (90) 3. 0787 (89) Resources Source Code Syntax Reference Snippets Links Directory Book Reviews http://www. cprogramming. com/tips/ (1 of 2) [05-11-2011 09: 30: 16] C/C++ Programming Tips and Tricks Function Lookup

Pointer Memory allocation Use ++ and -loop condition Comparisons in CC++ Temporariless Swap compiler tip Keep fit to program better Rounding to an Integer Effective Modularity in Programming Be careful about array size when u are using strcp Programming Tips Pointer Tips ???? Initialise all variables Fix all compiler warnings Next 30 Krishnamoorthi Subyraj P. S Krishna Guille Julian Sutherland Luna Man Gorn Sharma PCS Bhushan Verma Jatin Gandhi Jatin Gandhi Jia. Lu rickey 3. 3482 (112) 3. 3278 (1519) 3. 2288 (883) 3. 7353 (408) 3. 1000 (260) 3. 3972 (428) 3. 6408 (348) 3. 3389 (180) 3. 2275 (167) 3. 1589 (491) 3. 3854 (685) 3. 1152 (191) 3. 0889 (135)

Questions Programming FAQ Message Board Ask an Expert Email About Us Nikitas Angelinas 3. 6667 (552) Help your fellow programmers! Add a tip! — Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2005 Cprogramming. com. All rights reserved. http://www. cprogramming. com/tips/ (2 of 2) [05-11-2011 09: 30: 16] Programming Jobs – Cprogramming. com Search Starting out Getting Started Tutorials Quizzes Programming Jobs — Finding a Career in Programming So you're a programmer and you want a job? Read about our experiences with programming jobs and the job hunt. We cover both the job hunt the interview process along with links to other resources on programming interviews and careers. Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs

Job Hunting Having a good resume and cover letter, well, matters a lot. The short summary is be brief but bold. Read more in our section on job hunting tips: resume writing, cover letters, and portfolios. Tools Job Interviews What do I need? Compilers Editors Debuggers A good interview can make your application, a bad interview will break it. Programming interviews can be scary, involving both discussions about your qualifications and background, programming puzzles, and, in some cases, brain teasers. Read about job interviews, what you can expect, and how to handle it. Resources Source Code Syntax Reference Snippets Resources for Job Seekers

If you're worried about your problem solving skills, Programming Pearls by http://www. cprogramming. com/jobs/ (1 of 3) [05-11-2011 09: 30: 33] Programming Jobs – Cprogramming. com Links Directory Book Reviews Function Lookup Jon Bentley, can help get the juices flowing. Bentley covers

lots of techniques for approaching programming problems, and he covers problems of about the size for a decent interview question. The book How Would You Move Mount Fuji? can you give insight into the process of dealing with brain teasers although they are being phased out of the interview process at many places. TechInterview. org provides lots of interesting brainteaser puzzles to help practice for job interviews.

Questions Programming FAQ Message Board Ask an Expert Email About Us Job Openings Do you have a programming-related job opening, either an internship or fulltime, at your company? Let us know atcom and we'll post your offer! Join our mailing list to keep up with the latest news and updates about Cprogramming. com! Name Email Join Mailing List —- Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2005 Cprogramming. com. All rights reserved. http://www. cprogramming. com/jobs/ (2 of 3) [05-11-2011 09: 30: 33] Programming Jobs – Cprogramming. com http://www. cprogramming. com/jobs/ (3 of 3) [05-11-2011 09: 30: 33]

Tools of the Programmer's Trade – Cprogramming. com Search Starting out Getting Started Tutorials Quizzes Programming Tools Every programmer should have the proper tools. A good compiler, text editor, and debugger go a long way toward simplifying the mundane chores of programming and can help save time hunting down a strange memory error. Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs Compilers A compiler is a program that lets you turn your source code file (the file in which you write your program in C or C++) into an executable file that you can run on your computer. To program, you must have a compiler. For my nformation

on compilers, check out the compilers page. Tools What do I need? Compilers Editors Debuggers You may also want instructions on using a compiler. Build tools Using a tool like make can help reduce compile time and simplify the build process. Resources Source Code Syntax Reference Snippets Links Directory Book Reviews Function Lookup Text editors A text editor is a program that allows you to create a text file that contains your source code. A text editor can be as simple as Notepad or as complex as Emacs or Vim. A good text editor goes a long way toward simplifying the task of programming. You cannot write C++ code in Microsoft Word (without great difficulty).

For more information on why, and on what features to look for in a text editor, check out the text editor overview. Some good text editors for programmers include Vim and Emacs. Questions http://www. cprogramming. com/tools. html (1 of 3) [05-11-2011 09: 30: 50] Tools of the Programmer's Trade – Cprogramming. com Programming FAQ Message Board Ask an Expert Email About Us Debuggers A debugger is a tool for tracking down problems with your code -bugs — that result in unexpected behavior of a running program (" at runtime"). A debugger will let you get inside your code — you can run a program in a debugger and temporarily pause execution to see what line of code is being xecuted, the values of variables, and other information that will help you tell what your program is doing and why it isn't doing what you expect. A good debugger will help you pinpoint where your bug is located within your code and give you extra clues, such as what values each variable contains, that can help you figure out what mistake you have made. Many compilers come with built in debuggers, and GDB is also

available as a stand alone program; you can also read our GDB tutorial that takes you through the basics of using GDB. Memory profilers such as valgrind or Purify can help you debug memory leaks. Valgrind is free, but Purify will cost you real money. Books Check out our recommended book series From C++ Beginner To C++ Expert.

In addition, good references and interesting problems to challenge the mind should sit on every programmer's bookshelf. Although Google answers a lot of questions, the depth of books on specific topics or on computer science as a whole, such as the wellknown work by Donald Knuth, The Art of Computer Programming, can often help when you're stuck looking for the right algorithm, or just need some inspiration. Join our mailing list to keep up with the latest news and updates about Cprogramming. com! Name Email Join Mailing List http://www. cprogramming. com/tools. html (2 of 3) [05-11-2011 09: 30: 50] Tools of the Programmer's Trade – Cprogramming. com — Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2005 Cprogramming. com. All rights reserved. http://www. cprogramming. com/tools. html (3 of 3) [05-11-2011 09: 30: 50] C and C++ Compiler Information and Reviews – Cprogramming. com Search Starting out Getting Started Tutorials Quizzes Compilers What is a compiler? A compiler is necessary to make your source code (.. c, . cpp, or . cc files) into a running program. If you're just starting out, you'll need to make sure that you have one before you start programming. There are many compilers available on the internet and sold commercially in stores or online.

If you have Mac OS X, Linux, or other *nix variant (such as Unix or FreeBSD), you likely have a compiler such as gcc or g++ installed already. Moving on

Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs Tools What do I need? Compilers Editors Debuggers Compiler terminology Compile Colloquially, to convert a source code file into an executable, but strictly speaking, compilation is an intermediate step ? Link The act of taking compiled code and turning it into an executable ? Build A build refers to the process of creating the end executable (what is often colloquially referred to as compilation). Tools exist to help reduce the complexity of the build process-makefiles, for instance. ? Compiler Generally, compiler refers to both a ?

Resources Source Code Syntax Reference http://www. cprogramming. com/compilers. html (1 of 3) [05-11-2011 09: 31: 38] C and C++ Compiler Information and Reviews – Cprogramming. com Snippets Links Directory Book Reviews Function Lookup Questions Programming FAQ Message Board Ask an Expert Email About Us compiler and a " linker" ? Linker The program that generates the executable by linking ? IDE Integrated Development Environment, a combination of a text editor and a compiler, such that you can compile and run your programs directly within the IDE. IDEs usually have facilities to help you quickly jump to compiler errors. Understanding the Compilation Process ? ? ? ?

The compilation and linking process A brief description of exactly what happens when you compile a program, covering the above terms in more detail Dealing with Compilation Errors Some suggestions for hunting down compiler and linker errors in your code Understanding Compiler Warnings Learn what compiler warnings mean and the hows and whys of fixing them What's the difference between declaring and defining something in C and C+

+? Learn about the distinction between declaring a variable, class or function–and defining it–and why it matters when you have trouble compiling or linking your code What compilers are available? Windows ? ? Code:: Blocks and MINGW Our recommended free compiler setup! Code:: Blocks is lso available on Linux. Borland Find out how to download and set up Borland's free command-line compiler http://www. cprogramming. com/compilers. html (2 of 3) [05-11-2011 09: 31: 38] C and C++ Compiler Information and Reviews – Cprogramming. com ? Microsoft Visual C++ Read about Visual C ++ *nix ? ? g++ is a C++ compiler that comes with most *nix distributions. gcc is a C compiler that comes with most *nix distributions. Mac OS X ? Apple XCode XCode is the development platform to use for OS X or iPhone programming. —-Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2009 Cprogramming. com. All rights reserved. ttp://www. cprogramming. com/compilers. html (3 of 3) [05-11-2011 09: 31: 38] Text Editors for Programmeres – Programming Tools – Cprogramming. com Search Starting out Getting Started Tutorials Quizzes What is a text editor? A text editor is used to edit plain text files. Text editors differ from word processors, such as Microsoft Word or WordPerfect, in that they do not add additional formatting information to documents. You might write a paper in Word, because it contains tools to change fonts, margins, and layout, but Word by default puts that formatting and layout information directly into the file, which will confuse the compiler. If you open a . oc file in a text editor, you will notice that most of the file is formatting codes. Text editors, however, do not add formatting codes, which makes it easier to compile your code. Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs Why should I use a text editor? Text editors have a

feature set different from that of a traditional word processing program. For example, most won't let you include pictures, or include tables, or double-space your writing. The features of text editors vary from implementation to implementation, but there are several kinds of features that most editors have. Below are listed some of the most common and useful features. Tools What do I need? Compilers Editors Debuggers

Syntax highlighting Resources Source Code Syntax Reference Snippets Syntax highlighting is a very useful feature. It means that the editor will highlight certain words or types or syntax specific to a language. For example, if you have C++ highlighting turned on, the editor might make all C++ control flow keywords appear green. This makes it much easier to follow the flow of your http://www. cprogramming. com/texteditors. html (1 of 6) [05-11-2011 09: 31: 59] Text Editors for Programmeres – Programming Tools – Cprogramming. com Links Directory Book Reviews Function Lookup program. As another example, the editor might have all quoted text show up as light blue.

This way, if you forget to include an opening or closing quotation mark, you will quickly realize it because of the color of the text on your screen. A text editor might also indicate mismatched parentheses or brackets by turning them red; if you have a closing brace with no corresponding opening one, the color will tell you that you made a syntax error somewhere. //Here is an example of what text might look like in your editor. //This text is colored because it is a comment. if (x ; 5) { //The closing parenthesis is red because it is unmatched. x = 5 – ((3 + y) * (8 + (z / 24)))); } Questions Programming

FAQ Message Board Ask an Expert Email About Us Versatility How does the editor know which words to highlight?

Good question. The editor knows what language you are programming in. It does this by either having you tell it, or, like Vim, detecting the suffix of the file. If you are working on a file named code. cc, it will see the . cc and know to use C++ rules, but if you are working on one called code. html, it will apply HTML rules instead. Some editors know hundreds of languages, ranging from the commonplace (C, Java, Perl) to the truly obscure (TADS, ABAQUS). This means that you can use the same editor to program in practically any language you can think of and still enjoy the same feature and command set that you've become accustomed to. Automatic indenting utomatic indenting is probably the most useful feature of a text editor. would you rather deal with code that looks like this (taken from a fifteen-puzzle): int get_col (int tile_id) { /*Cycle through… */ int i = 0, j = 0; while (i < Dim) http://www. cprogramming. com/texteditors. html (2 of 6) [05-11-2011 09: 31: 59] Text Editors for Programmeres – Programming Tools – Cprogramming. com { if (board[i][j] == tile_id) { return i; } /*If you've hit the end of the row, move to the beginning of the * next. */ if (i == Dim-1) { j++; i = 0; /*Otherwise move to the next space in the row. */ } else { i++; } } /*This is only to get rid of the warning. / return i; } or code that looks like this? : int get_col (int tile_id) { /*Cycle through… */ int i = 0, j = 0; while (i ; Dim) { if (board[i][j] == tile_id) { return i; http://www. cprogramming. com/texteditors. html (3 of 6) [05-11-2011 09: 31: 59] Text Editors for Programmeres – Programming Tools – Cprogramming. com } /*If you've hit the end of the row, move to the beginning of the next*/ if (i == Dim-1) { j+

+; i = 0; /*Otherwise move to the next space in the row. */ } else { i++; /*This is only to get rid of the warning. */ return i; I thought so. A text editor will spare you the trouble of having to put in all the tabs yourself by adding them automatically.

This has the benefit of letting you follow the control flow through indentation, so that you can make sure you are in the right block of code as you write. Quick navigation features If your program is anything above trivial, you'll want to be able to move through it quickly to find certain functions, instances of certain variables, or particular lines. Text editors typically have more sophisticated movement capability than word processors. For example, say you're compiling a program and find that you have a syntax error on line 312. In Vim, all you have to do is type 312G, and the cursor will move to line 312. (How does Vim know you don't want to type the characters 312G into the document? More on that in the links at the end of the article.) http://www. cprogramming. om/texteditors. html (4 of 6) [05-11-2011 09: 31: 59] Text Editors for Programmeres – Programming Tools – Cprogramming. com Which text editor should I use? What's the difference between them? How do I get one? How much do they cost? There are many, many different editors available, with Vim and Emacs being two of the most popular, portable, and powerful. Another popular editor is Notepad++, a vastly improved version of Notepad. Most editors (Vim and Emacs included) are free, but some are shareware. I use Vim, but each editor has its adherents. For a good listing of some of the best editors available for your platform, check out this FAQ on text editors. It's aimed at STATA users, but all the editors listed are just fine for writing C++ code.) Join our mailing list to keep

up with the latest news and updates about Cprogramming. com! Name Email Join Mailing List —-Interested in advertising with us? Please read our privacy policy. http://www. cprogramming. com/texteditors. html (5 of 6) [05-11-2011 09: 31: 59] Text Editors for Programmeres – Programming Tools – Cprogramming. com Copyright © 1997-2005 Cprogramming. com. All rights reserved. http://www. cprogramming. com/texteditors. html (6 of 6) [05-11-2011 09: 31: 59] Cprogramming. com – Debuggers Search Starting out Getting Started Tutorials Quizzes

Debuggers and Debugging Techniques Writing code is only the beginning of completing a programming project. After the original implementation is complete, it is time to test the program. Unfortunately, only the rare (and usually non-priority) code project is completed without a single bug. Hence, debugging takes on great importance: the earlier you find an error, the less it will cost. A major bug found before distribution is much, much cheaper to fix than a major bug found by thousands of your users. A debugger allows you, the programmer, to interact and inspect the running program, making it possible to trace the flow of execution and track down the problems.

Read on for tutorials on debuggers like GDB and Visual Studio, as well as more exotic and powerful tools like Valgrind. Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Jobs Tools What do I need? Compilers Editors Debuggers GDB GDB is the standard debugger for Linux and Unixlike operating systems. ? ? Resources Source Code Syntax Reference Snippets GDB by Example – an introduction to GDB More Advanced GDB – more advanced debugging techniques using GDB http://www. cprogramming. com/debuggers. html (1 of 3) [05-11-2011 09:

32: 37] Cprogramming. com – Debuggers Links Directory Book Reviews Function Lookup Advanced Linux Debugging ? Questions Programming FAQ Message Board Ask an Expert Email About Us ? unting segmentation faults and pointer errors – Learn how to debug the trickiest programming problems Finding memory leaks and other errors with Valgrind – Learn how to use Valgrind, a powerful tool that helps find memory leaks and invalid memory usage. Visual Studio Visual Studio is a powerful editor and debugger for Windows ? ? ? ? ? ? ? ? Debugging with Visual Studio, Part 1: Debugging Concepts Debugging with Visual Studio, Part 2: Setting up the IDE Debugging with Visual Studio, Part 3: Using Breakpoints Effectively Debugging with Visual Studio, Part 4: Setting up Code for the Debugger Debugging with Visual Studio, Part 5: Using Trace and Log Messages Debugging with Visual Studio, Part 6: Remote Debugging 5 Awesome Visual Studio Debugger Features Skip Stepping Into Library Functions with Visual Studio's NoStepInto Option. General Debugging Stratgies ? ug prevention, debugging strategies, tips, and gotchas – Help prevent small problems from becoming big headaches http://www. cprogramming. com/debuggers. html (2 of 3) [05-11-2011 09: 32: 37] Cprogramming. com – Debuggers ? How to Avoid, Find (and fix) Memory Errors in Your C/C++ Code —-Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2005 Cprogramming. com. All rights reserved. http://www. cprogramming. com/debuggers. html (3 of 3) [05-11-2011 09: 32: 37] Free Source Code – Cprogramming. com Search Starting out Getting Started Tutorials Quizzes C and C++ Source Code Find C and C++ source code to help you learn to program.

You can submit your own code, or you can simply browse and download the code of others. Finally, you might want to check out Code Cogs – An Open Source Scientific Library / Database in C++ for more code. Home | Add Resource | Modify Resource Index :: Index Categories: There are a total of 8 categories at this level: Moving on Advanced Tutorials Articles Practice Problems Tips and Tricks Tools What do I need? Compilers Editors Debuggers Resources Source Code Links Directory Book Reviews Function Lookup http://www. cprogramming. com/cgi-bin/source/source. cgi (1 of 2) [05-11-2011 09: 32: 42] Free Source Code – Cprogramming. com Questions Programming FAQ Message Board Ask an Expert Email About Us

Algorithms (13) Code demonstrating programming concepts Games (12) Source code for games Language Features (8) Source code demonstrating specific features of C or C++ Sound (1) Source code demonstrating sound I/O Artificial Intelligence (1) Source code demonstrating Artificial Intelligence concepts Graphics (11) Source code for accessing the graphics card Projects (2) Source code for full programs Utilities (9) Source code that performs useful utility-like functions There are a total of 57 resources for you to browse. —-Interested in advertising with us? Please read our privacy policy. Copyright © 1997-2006 Cprogramming. com. All rights reserved. Copyright 2000 © Obsidian-Scripts. All rights reserved. http://www. cprogramming. com/cgi-bin/source/source. cgi (2 of 2) [05-11-2011 09: 32: 42] Cprogramming. om – CC++ Language Syntax Reference Search Starting out Getting Started Tutorials Quizzes C and C++ Language Syntax Reference Most of the notes in this reference conform to both C and C++. When a syntax distinction between C and C++ exists, it is explicitly noted. Some

elements are listed under multiple categories, in which case all but the primary reference have listed with an @ sign. ? Flow Control r If statement r If-else statement r Switch and case r goto r break r continue ? Loops r For loop r While loop r Do while loop ? Variables r primitive variable declarations r Non-const pointer declaration r @Const Pointers vs. Const Pointer Data ?

Pointers r getting a memory address – primitive type r getting a memory address – arrays r getting a memory address – functions r getting a memory address stored in a pointer r dereferencing a pointer r Const Pointers vs. Const Pointer Data ? Typecasting r C-style typecast r static cast r dynamic cast Moving on Advanced Tutorials Articles Practice Problems Tools What do I need? Compilers Editors Debuggers Resources Source Code Syntax Reference Snippets Links Directory Book Reviews Function Lookup Questions Programming FAQ Message Board http://www. cprogramming. com/reference/ (1 of 3) [05-11-2011 09: 33: 01] Cprogramming. com – CC++ Language Syntax Reference Ask an Expert Email About Us ? ? ? ? ? onst cast r reinterpret cast Truth and Falsehood r True r False Operators r assignment r comparison – equality r Boolean Or r Boolean And r Boolean Not Structs r basic struct declaration r pointer to a struct declaration r access element, basic r dereferencing point to struct to access member Arrays r basic array declarations r accessing array elements C Preprocessor Directives r #include r #define r #if r #ifdef r #ifndef r Join our mailing list to keep up with the latest news and updates about Cprogramming. com! Name Email Join Mailing List —– http://www. cprogramming. com/reference/ (2 of 3) [05-11-2011 09: 33: 01] Cprogramming. com – CC++ Language Syntax Reference Interested

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