



## Useful Resources for C++ Programming Language

### Online C++ Compiler

01. [Online C++ Compiler - online editor \(onlinegdb.com\)](https://onlinegdb.com)
02. [Online Code Editors, Compilers & Playground | Sololearn](https://sololearn.com)
03. [Online C++ Compiler \(programiz.com\)](https://programiz.com)
04. [Online C++ Compiler \(tutorialspoint.com\)](https://tutorialspoint.com)
05. [C++ Online Compiler \(Editor / Interpreter\) \(w3schools.com\)](https://w3schools.com)
06. [C++ Shell \(cpp.sh\)](https://cpp.sh)
07. [C++ Online Compiler & Interpreter - Replit](https://replit.com)
08. [Online C++ Compiler - Online C++ Editor - Run C++ Online - Online C++ Runner \(jdoodle.com\)](https://jdoodle.com)
09. [C++ - OneCompiler - Write, run and share C++ code online](https://onecompiler.com)
10. [Online C++ Compiler | Online C++ Editor - Scaler Topics](https://scaler.com)
11. [Online C/C++ Compiler – Techie DelightOnline C / C++ Compiler \(online-cpp.com\)](https://techiedelight.com)
12. [Online C++ Compiler - myCompiler](https://mycompiler.com)
13. [Online C++ compiler and IDE - API provided by Sphere Engine - Ideone.com](https://ideone.com)
14. [Online C++ Compiler \(online-cpp.com\)](https://online-cpp.com)
15. [Online C++ Compiler - Coding Ninjas Codestudio](https://codingninjas.com)
16. [Compiler Explorer \(godbolt.org\)](https://godbolt.org)
17. [compile c++ gcc online \(rextester.com\)](https://rextester.com)
18. [Online C++ compiler | Online editor and compiler \(paiza.io\)](https://paiza.io)
19. [C++ Online Compiler and Editor \(IDE\) - workat.tech](https://workat.tech)
20. [Online C++ Compiler \(geekflare.com\)](https://geekflare.com)
21. [Compile and run the code with online compiler and IDE | CodeChef](https://codechef.com)
22. [C++ Online IDE, Compiler, Interpreter & Code Editor \(codeanywhere.com\)](https://codeanywhere.com)
23. [Online C++ Compiler | Run C++ Online - CodeSpeedy](https://codespeedy.com)
24. [C++ Online Compiler - GeeksforGeeks](https://geeksforgeeks.com)
25. [Online C++ IDE - OnlineIDE \(online-ide.com\)](https://online-ide.com)
26. [C++ Online IDE | C++ Online Compiler | MYTAT](https://mytatt.com)
27. [Online C/C++ Compiler – Techie Delight](https://techiedelight.com)

### Coding Practice

01. [LeetCode - The World's Leading Online Programming Learning Platform](https://leetcode.com)
02. [Competitive Programming | Participate & Learn | CodeChef](https://codechef.com)
03. [Coderbyte | Technical Assessments & Interviews](https://coderbyte.com)
04. [Home | Codewars](https://codewars.com)
05. [Coding Games and Programming Challenges to Code Better \(codinggame.com\)](https://codinggame.com)
06. [HackerRank](https://hackerrank.com)
07. [Technical Assessment & Code Challenge Platform | Geektastic](https://geektastic.com)
08. [About - Project Euler](https://projecteuler.net)
09. [Sphere Online Judge \(SPOJ\)](https://spoj.com)
10. [Top Website Designers, Developers, Freelancers for Your Next Project | Topcoder](https://topcoder.com)
11. [GeeksforGeeks | A computer science portal for geeks](https://geeksforgeeks.com)

## **Introduction to C++ Programming Language – Coding Examples**

01. [C++ Examples | Programiz](#)
02. [C++ Questions and Answers \(tutorialspoint.com\)](#)
03. [Solve C++ | HackerRank](#)
04. [C++ Examples \(codebind.com\)](#)
05. [250 C++ Program Examples & Solutions | Techstudy](#)
06. [C++ Basic - Exercises, Practice, Solution - w3resource](#)
07. ["Examples" - C++ Search results \(cplusplus.com\)](#)
08. [C++ Tutorial - Learn C++ Programming with examples \(beginnersbook.com\)](#)
09. [Top 10 C++ Projects Ideas for C++ Beginners in 2023 \[Updated\] \(hackr.io\)](#)
10. [An Introduction to C++ Programming for First-time Programmers - C++ Programming Tutorial \(ntu.edu.sg\)](#)
11. [C++ Overview \(uhcl.edu\)](#)

## **Extra Resources: Data Structure – Coding Examples**

01. [Data Structures in C++ — Part 1. Implementing common data structures in... | by Vijini Mallawaarachchi | Towards Data Science](#)
02. [C++ | Data Structures Code Examples \(happycodings.com\)](#)
03. [Stack Data Structure In C++ With Illustration \(softwaretestinghelp.com\)](#)
04. <https://cplusplus.com/doc/tutorial/structures/>
05. [C++ Data Structures \(tutorialspoint.com\)](#)
06. [9 C++ data structures you need to know for your coding interview \(educative.io\)](#)
07. [fullText.pdf \(clemsun.edu\)](#)
08. [Data Structures in C++ - TechVidvan](#)
09. [Data Structure Programs using C and C++ - Solved Data Structure Programs \(includehelp.com\)](#)
10. [Stack Data Structure and Implementation in Python, Java and C/C++ \(programiz.com\)](#)
11. [C++ Tutorial: Linked List - 2020 \(bogotobogo.com\)](#)
12. [Hash Table in C/C++ - A Complete Implementation | DigitalOcean](#)
13. [C++ STL: Policy based data structures - Codeforces](#)
14. [Abstract Data Types in C++ — Programming and Data Structures 0.2 documentation \(eecs280staff.github.io\)](#)
15. [Data Structures in C++ - Sanfoundry](#)
16. [Arrays as Data Structure in C/C++ Programming – MYCPLUS - C and C++ Programming Resources](#)
17. [Algorithms and data structures in C/C++ - Cprogramming.com](#)
18. [C++ for Programmers: C++'s Built-In Data Structures Cheatsheet | Codecademy](#)
19. [Data Structures and Algorithms Problems in C++ using STL | by Coding Freak | Techie Delight | Medium](#)
20. [Implementation of A\\* \(redblobgames.com\)](#)
21. [Red Black Trees \(with implementation in C++, Java, and Python\) | Algorithm Tutor](#)
22. [Chapter 7. Designing lock-free concurrent data structures - C++ Concurrency in Action: Practical Multithreading \(manning.com\)](#)
23. [C++ Structures \(struct\) \(w3schools.com\)](#)
24. [Implementing Binary tree in C++ \(opengenius.org\)](#)
25. [Section 1: C++ data structures – CS 61 2021 \(harvard.edu\)](#)
26. [Linked List Data Structure \(programiz.com\)](#)
27. [Sets in C++ Explained with Examples | Udacity](#)

28. [Top 50+ Data Structure Interview Questions and Answers \(2022\) - InterviewBit](#)

### **Extra Resources: Algorithm – Coding Examples**

01. [C++ Algorithm | Examples of C++ Algorithm with Detail Explanation \(educba.com\)](#)
02. [C++ Basic Algorithm - Exercises, Practice, Solution - w3resource](#)
03. [The 114 standard C++ algorithms. Introduction | by Šimon Tóth | ITNEXT](#)
04. [Top 5 Beautiful C++ std Algorithms Examples - CodeProject](#)
05. [C++ | Algorithms Code Examples \(happycodings.com\)](#)
06. [C++ Program for QuickSort - GeeksforGeeks](#)
07. [Dijkstra's Algorithm in C++ | Shortest Path Algorithm | FavTutor](#)
08. [GitHub - daancode/a-star: A\\* algorithm C++ implementation.](#)
09. [BFS Graph Algorithm\(With code in C, C++, Java and Python\) \(programiz.com\)](#)
10. [QuickSort \(With Code in Python/C++/Java/C\) \(programiz.com\)](#)
11. [Linear Search Algorithm with C++ Code | Data Structures & Algorithms - Simple Snippets](#)
12. [Quick Sort In C++ With Examples \(softwaretestinghelp.com\)](#)
13. [Insertion Sort In C++ With Examples \(softwaretestinghelp.com\)](#)
14. [C++ Algorithms - Sanfoundry](#)
15. [How to implement Dijkstra's Algorithm in C++ \(educative.io\)](#)
16. [Kmp Algorithm C++ With Code Examples \(folkstalk.com\)](#)
17. [Red Black Trees \(with implementation in C++, Java, and Python\) | Algorithm Tutor](#)
18. <https://cplusplus.com/reference/algorithm/>
19. [Dijkstra's Algorithm: C++, Python Code Example \(guru99.com\)](#)
20. [Algorithms library - cppreference.com](#)
21. [C++ Source Codes \(fsu.edu\)](#)
22. [Algorithms in C++. Complete Search, Greedy, Divide and... | by Vadim Smolyakov | Towards Data Science](#)
23. [Dynamic Programming in C++ - Cprogramming.com](#)
24. [Merge Sort Algorithms and Examples| Merge Sort using Java, C++ \(mygreatlearning.com\)](#)
25. [C++ Core Guidelines \(isocpp.github.io\)](#)
26. [C++17 in details: Parallel Algorithms - C++ Stories \(cppstories.com\)](#)
27. [A Genetic Algorithm Function Optimizer in C++ - technical-recipes.com](#)
28. [Boruvka's algorithm for Minimum Spanning Tree in C++ - CodeSpeedy](#)
29. [Crack the top 40 C++ coding interview questions \(educative.io\)](#)

### **Extra Resources: Microcontroller – Coding Examples**

01. [C++ and microcontrollers: using and testing - CodeProject](#)
02. [C++ on microcontrollers 1 - introduction, and an output pin class - Wouter van Ooijen \(embeddedrelated.com\)](#)
03. [C++ Tutorial: Embedded Systems Programming - 2020 \(bogotobogo.com\)](#)
04. [How to Use C++ with STM32CubeIDE - Shawn Hymel](#)
05. [C++ in Embedded Systems – Part 1 | Embedded.com](#)
06. [C++ template metaprogramming for AVR microcontrollers - Embedded.com](#)
07. [Embedded Software Development in Visual Studio Code - C++ Team Blog \(microsoft.com\)](#)
08. [Get started with microcontrollers | TensorFlow Lite](#)
09. [hirakuni45/RX: Renesas RX Microcontroller, C++ framework, Library, Sample \(github.com\)](#)
10. [Step by Step Procedure for Pic Microcontroller Programming \(elprocus.com\)](#)
11. [A Technique for Register Access in C++ \(accu.org\)](#)

12. [Ten C++ Advantages over C in Embedded Systems | Stratify Labs](#)
13. [Step by Step Guide to Microcontroller Programming - HardwareBee](#)
14. [9. Embedded programming - FabAleza \(fabacademy.org\)](#)
15. [“Bare Metal” STM32 Programming \(Part 7\): Embedded C++ Inheritance – Vivonomicon's Blog](#)
16. [How to Program Raspberry Pi Pico using C/C++ SDK \(circuitdigest.com\)](#)
17. [Efficient C Code for 8-bit Microcontrollers \(barrgroup.com\)](#)
18. [Debug output on microcontrollers: how Concepts and Ranges put my printf to rest \(pvs-studio.com\)](#)
19. [SCT  \$\mu\$ Connect – microcontroller support in YAKINDU Statechart Tools \(itemis.com\)](#)
20. [Embedded C/C++ Unit Testing Basics | Interrupt \(memfault.com\)](#)
21. [The Arduino Language in 10 Points - The Robotics Back-End \(roboticsbackend.com\)](#)
22. [C++ On Embedded Systems | mbedded.ninja](#)
23. [Visual Studio Code for C/C++ with ARM Cortex-M: Part 1 – Installation | MCU on Eclipse](#)
24. [Everything You Need to Know About Arduino Code \(circuitio.io\)](#)
25. [TinyML: Getting Started with TensorFlow Lite for Microcontrollers \(digikay.com\)](#)
26. [Getting started with the GD32VF103 RISC-V Microcontroller | Georg's Log \(gms.tf\)](#)
27. [JavaScript for Microcontrollers and IoT: Part 1 \(auth0.com\)](#)
28. [4. Outputs, Inputs, and Timers - Making Embedded Systems \[Book\] \(oreilly.com\)](#)
29. [AVR-gcc.pdf \(usc.edu\)](#)
30. [MicroPython: An Intro to Programming Hardware in Python – Real Python](#)
31. [Basics of Embedded C Program : Introduction, Structure and Example \(electronicshub.org\)](#)
32. [Easy Raspberry Pi Pico Microcontroller C / C++ Programming on Windows \(paulbuejr.com\)](#)
33. [Modern C++ in embedded development: using C libraries - Semblie d.o.o Tuzla](#)
34. [Useful tips for learning embedded programming | Artek Labs Tutorials](#)
35. [Microcontroller Programming | Sample Programs | Exercise \(emertxe.com\)](#)
36. [MicroPython Optimizes Python for Microcontrollers | ICS](#)
37. [C++ On Embedded Systems \(bitbashing.io\)](#)
38. [Programming PIC Microcontrollers : 10 Steps - Instructables](#)
39. [C++ Templates for Embedded Code \(Part 2\) - Lucky Resistor](#)
40. [C-Code Tutorial for Using the SPI Interface on the MAX7456 On-Screen Display | Maxim Integrated](#)

### **Extra Resources: Operating System – Coding Examples**

01. [How to develop an operating system using - C++ Articles \(cplusplus.com\)](#)
02. [GitHub - wichtounet/thor-os: Simple operating system in C++, written from scratch](#)
03. [Writing OS Independent Code in C/C++ - GeeksforGeeks](#)
04. [Writing your own Operating System | by Chamath Abeysinghe | Medium](#)
05. [Building your own operating system - CodeProject](#)
06. [Archived | Building your own memory manager for C/C++ projects - IBM Developer](#)
07. [ewili13\\_submission\\_14.pdf \(upenn.edu\)](#)
08. [Make a Simple Operating System : 11 Steps \(with Pictures\) - Instructables](#)
09. [C++ Memory Management: new and delete \(programiz.com\)](#)
10. [C++ Tutorial: Memory Allocation - 2020 \(bogotobogo.com\)](#)
11. [Why the C Programming Language Still Runs the World | Toptal](#)
12. [A hands-on Win32 Windows operating system programming used to understand the Windows OS internal construct, functionalities and technologies \(tenouk.com\)](#)
13. [Bare Bones - OSDev Wiki](#)
14. [Programming Guide :: CUDA Toolkit Documentation \(nvidia.com\)](#)
15. [Memory Management in C++ | Examples to Implement \(educba.com\)](#)

16. [How to write a simple operating system in assembly language \(sourceforge.net\)](#)
17. [Linux Tutorial: POSIX Threads \(cmu.edu\)](#)
18. [high-level-cpp-rcu\\_informatics\\_2017.pdf \(martong.github.io\)](#)
19. [Microsoft Word - PortableSystems.doc \(appinf.com\)](#)
20. [ARM Compiler toolchain Using the Compiler Version 5.01](#)
21. [Operating Systems: Processes \(uic.edu\)](#)
22. [www2.hawaii.edu/~takebaya/ics111/process\\_of\\_programming/process\\_of\\_programming.html](#)
23. [Sharing memory between processes - 1.54.0 \(boost.org\)](#)
24. [Practical Application for Operating Systems: Code for Schedule Processes | Study.com](#)
25. [Write your Own Virtual Machine \(jmeiners.com\)](#)
26. [Linux Serial Ports Using C/C++ | mbedded.ninja](#)
27. [Getting Started with the LLVM System — LLVM 16.0.0git documentation](#)
28. [Unix And C/C++ Runtime Memory Management For Programmers \(uohyd.ac.in\)](#)