# CE103 Algorithms and Programming I

# Week-6

# C++ Functional Console Programming

## Books and Resources

[free-programming-books/free-programming-books-langs.md at master · EbookFoundation/free-programming-books · GitHub](https://github.com/EbookFoundation/free-programming-books/blob/master/books/free-programming-books-langs.md#c-1)

# C++ Functional Console Programming

We will follow the following topics

* [Learn C++ Programming](https://www.programiz.com/cpp-programming)
* [Introduction to C++ | C Plus Plus Programming Language Tutorials](http://www.btechsmartclass.com/cpp-programming/index.php)
* [The C and C++ programming tutorials, hands-on approach with program examples, code samples and tons of output images using Visual C++, C++ Builder, Linux gcc and g++ compilers and IDE](https://www.tenouk.com/cncplusplustutorials.html)

1. Cpp Programming
2. C++ Introduction
3. C++ Variables and Literals
4. C++ Data Types
5. C++ Basic I/O
6. C++ Type Conversion
7. C++ String to Int and Vice-Versa
8. C++ String to Float, Double and Vice-Versa
   1. C++ Operators
   2. C++ Comments
9. C++ Flow Control
10. C++ if..else
11. C++ for loop
12. C++ do..while loop
13. C++ break statement
14. C++ continue statement
15. C++ switch statement
16. C++ goto statement
17. C++ Functions
18. C++ Functions
19. C++ Function Types
20. C++ Function Overloading
21. C++ Default Argument
22. C++ Storage Class
23. C++ Recursion
24. C++ Return Reference
25. C++ Arrays & String
26. C++ Arrays
27. Multidimensional Arrays
28. C++ Function and Array
29. C++ String
30. C++ Structures
31. C++ Structures
32. Structure and Function
33. C++ Pointers to Structure
34. C++ Enumeration
35. C++ Object & Class
36. C++ Objects and Class
37. C++ Constructors
38. C++ Objects & Function
39. C++ Operator Overloading
40. C++ Pointers
41. C++ Pointer
42. C++ Pointers and Arrays
43. C++ Pointers and Functions
44. C++ Memory Management
45. C++ Inheritance
46. C++ Inheritance
47. Inheritance Access Control
48. C++ Function Overriding
49. Multiple & Multilevel Inheritance
50. C++ Friend Function
51. C++ Virtual Function

C++ Templates