Cpp Prep Sheet

GFG - Examples

1. https://www.geeksforgeeks.org/cpp/gcd-in-cpp/
2. https://www.geeksforgeeks.org/cpp/cpp-program-for-program-to-find-lcm-of-two-numbers/
3. https://www.geeksforgeeks.org/cpp/cpp-program-to-check-whether-a-number-is-palindrome-or-not/
4. https://www.geeksforgeeks.org/cpp/cpp-program-to-check-armstrong-numbers/
5. https://www.geeksforgeeks.org/cpp-program-to-find-sum-of-fibonacci-numbers-at-even-indexes-upto-n-terms/
6. Print Right Half Pyramid Pattern
7. Print Left Half Pyramid Pattern
8. Print Simple Full Pyramid Pattern
9. Print Inverted Pyramid
10. Print Triangle Pattern
11. Print Number Pattern without reassigning
12. Print Character Pattern
13. Print Continuous Character Pattern
14. Print Full Diamond Shape Pyramid
15. Print Inverted Hollow Star Pyramid Pattern
16. Print Hollow Star Pyramid in a Diamond Shape
17. Print Pascal's Triangle
18. Print Floyd's pattern Triangle Pyramid
19. Print Reverse Floyd Pattern Triangle Pyramid
20. Display Prime Numbers Between Two Intervals Using Function

21. Check Whether a Number Can be Express as Sum of Two Prime Numbers
22. Find the Sum of Natural Numbers using Recursion
23. Calculate the Factorial of a Number Using Recursion
24. Reverse a Sentence Using Recursion
25. Calculate Power Using Recursion
26. Variadic Function Templates
27. Check if Two Arrays Are Equal or Not
28. Maximum and Minimum in an Array
29. Calculate the Average of all the Elements Present in an Array
30. Merge Two Arrays
31. Print a 2D Array
32. Find Common Array Elements
33. Remove Duplicate Elements From an Array
34. Remove All Occurrences of an Element in an Array
35. Prefix Sum Array
36. Rotate the Array D times
37. Copy All the Elements of One Array to Another in the Reverse Order
38. Add Two Matrices
39. Check Whether Two Matrices Are Equal or Not
40. Compute the Sum of Diagonals of a Matrix
41. Print Boundary Elements of a Matrix

42. Find the Transpose of a Matrix
43. Find the Determinant of a Matrix
44. Find the Normal and Trace of Matrix
45. Multiply Two Matrices
46. Rotate Matrix Elements of a Matrix
47. Interchange Elements of First And Last Rows in Matrix
48. Prefix sum of Matrix
49. C++ Program for Pointers
50. C++ Program for an Array of Pointers
51. C++ Program for void Pointer
52. C++ Program for Reference To a Pointer
53. C++ Program for Function Pointer
54. C++ Program for this Pointer
55. C++ Program For Opaque Pointer
56. Find the Length of a String
57. Access any Characters in a Given String
58. Determine the Unicode Code Point at a given index
59. Replace a Character in a String
60. Compare Two Strings
61. Add/Concatenate Two Strings
62. Add 2 Binary Strings
63. Remove Leading Zeros

64. Compare Two Strings Lexicographically
65. Reverse a String
66. check if the String is Palindrome
67. Print the First Letter of Each Word of a String
68. Insert a String into Another String
69. Splitting into a Number of Sub-Strings
70. Reverse a String Using Stacks
71. Check Whether the Given String is Pangram
72. Binary to Decimal Conversion
73. Binary to Octal Conversion
74. Octal to Decimal Conversion
75. Decimal to Octal Conversion
76. Hexadecimal to Decimal Conversion
77. Decimal to Hexadecimal Conversion
78. Decimal to Binary Conversion
79. Boolean to String Conversion
80. String to Double Conversion
81. Double to String Conversion
82. String to Long Conversion
83. Long to String Conversion
84. Int to Char Conversion
85. Char to Int Conversion

86. Pass or Return a Structure to/from a Function
87. Store Information of a Student in a Structure
88. Structure Sorting (By Multiple Rules)
89. Create a Class and Object
90. Show Encapsulation
91. Show Inheritance
92. Show Abstraction in Class
93. Show Data Hiding in Class
94. Show Polymorphism in Class
95. Show Function Overloading
96. Show Function Overriding
97. Show Usage of Access Modifier
98. Show Use of This Keyword in Class
99. Show Usage of Static keyword
100. Friend Functions
101. Virtual Destructor
102. Create Abstract Class
103. Create Singleton Class
104. Create an Interface
105. Overload Increment ++ and Decrement
106. Add Two Complex Numbers
107. Reverse A Vector Using STL

108. Copy A Vector Using STL
109. Check If Two Vectors Contain the Same Elements or Not
110. Convert a Vector of Pairs to a Map
111. Show transform () Using STL
112. Merge Two STL Maps
113. Stack Of Pair Using STL
114. Find the Frequency of an Element in a Multiset
115. How to Initialize Multiset with Custom Comparator
116. Find Permutations of a Given String Using STL
117. Find All Permutations of an Array Using STL.
118. Find Maximum and Minimum Elements in a Set Using STL
119. C++ Program to Find Next Greater Element
120. Reverse Priority
121. Implement Binary Search Functions Using STL