

DATA STRUCTURESand algorithms

CCS231\_CCS212\_CS-212



**Prepared By**

Students ID

1. …
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**Under Supervision**

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**Questions**

**Q(1):**

**[CCS212/CS-212] Write C++ program to implement all features of Priority Queue**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(2):**

**[CCS212/CS-212] Write C++ program to implement all features of Double Ended Queue**

**[CCS231] What is the time complexity of program?**

**Ans:**

**Q(3):**

**[CCS212/CS-212] Write C++ program to implement all features of Double Ended Queue**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(4):**

**[CCS212/CS-212] Write C++ program to implement all features of Full Binary Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(5):**

**[CCS212/CS-212] Write C++ program to implement all features of Degenerate Binary Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(6):**

**[CCS212/CS-212] Write C++ program to implement all features of Complete Binary Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(7):**

**[CCS212/CS-212] Write C++ program to implement all features of Perfect Binary Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(8):**

**[CCS212/CS-212] Write C++ program to implement all features of Balanced Binary Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(9):**

**[CCS212/CS-212] Write C++ program to implement all features of AVL Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(10):**

**[CCS212/CS-212] Write C++ program to implement all features of Red-Black Tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(11):**

**[CCS212/CS-212] Write C++ program to implement all features of B-tree**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(12):**

**[CCS212/CS-212] Write C++ program to implement Huffman Code**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(13):**

**[CCS212/CS-212] Write C++ program to convert Graph to Adjacency Matrix**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(14):**

**[CCS212/CS-212] Write C++ program to convert Graph to Adjacency List**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(15):**

**[CCS212/CS-212] Write C++ program to implement Breadth First Search or BFS for a Graph**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(16):**

**[CCS212/CS-212] Write C++ program to implement Depth First Search or DFS for a Graph**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(17):**

**[CCS212/CS-212] Write C++ program to implement Graph Coloring**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(18):**

**[CCS212/CS-212] Write C++ program to convert Infix to Postfix**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

**Q(19):**

**[CCS212/CS-212] Write C++ program to evaluate the postfix expression**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***

# **Q(20):**

# **[CCS212/CS-212] Write C++ program to Implement Stack using Queues**

**[CCS231] What is the time complexity of program?**

**Ans:**

**/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\*/\***