**DSA Practice Test – 9** 9th Nov 2024

**1. Maximum Subarray Sum – Kadane‟s Algorithm:**

**Code:**

**Output**:

**Time Complexity:** O (n)

**Space Complexity:** O (1)

**2. Maximum Product Subarray**

**Code:**

**Output:**

**Time Complexity:** O (n)

**Space Complexity:** O (1)

**3. Search in a sorted and rotated Array**

**Code:**

**Output:**

**Time Complexity:** O (n)  
**Space Complexity:** O (1)

**4. Container with Most Water**

**Code:**

**Output:**

**Time Complexity:** O (n log n)  
**Space Complexity:** O (1)

**5. Find the Factorial of a large number**

**Code:**

**Output:**

**Time Complexity:** O (n)

**Space Complexity:** O (1)

**6. Trapping Rainwater Problem**

**Code:**

**Output:**

**Time Complexity:** O (n log n)

**7. Chocolate Distribution Problem**

**Code:**

**Output:**

**Time Complexity:** O (n)

**8. Merge Overlapping Intervals**

**Code:**

**Output:**

**Time Complexity:** O (n)

**Space Complexity:** O (1)

**9. A Boolean Matrix**

**Code:**

**Output:**

**Time Complexity:** O(n2)

**Space Complexity:** O (1)

**10. Print a given matrix in spiral form**

**Code:**

**Output:**

**Time Complexity:** O (n2)

**11. Check if given Parentheses expression is balanced or not**

**Code:**

**Output:**

**Time Complexity:** O (n)

**Space Complexity:** O (1)

**12. Check if two Strings are Anagrams of each other**

**Code:**

**Output:**

**Time Complexity:** O (n)

**Space Complexity:** O (1)

**13. Longest Palindromic Substring**

**Code:**

**Output:**

**Time Complexity:** O (n2)

**14. Longest Common Prefix using Sorting**

**Code:**

**Output:**

**Time Complexity:** O (n log n)

**15. Delete middle element of a stack**

**Code:**

**Output:**

**Time Complexity:** O(n)

**Space Complexity:** O(1)

**16. Next Greater Element (NGE) for every element in given Array**

**Code:**

**Output:**

**Time Complexity: O (n)**

**17. Print Right View of a Binary Tree**

**Code:**

**Output:**

**Time Complexity:** O (n)

**Space Complexity:** O(1)

**18. Maximum Depth or Height of Binary Tree**

**Code:**

**Output:**

**Time Complexity:** O (n)