etraveli group

Programming Test 2

1. You can use any OOPS language to code the solution.
2. Evaluation of your code will be based on patterns used, maintainability, scalability , performance, optimisation, loose coupling of your solution.

1. Write a Java program to find out whether the given String is Palindrome or not.

OR

2. Write a Java Program to reverse the letters present in the given String.

3. Write a Java program to print the nodes present in the Circular LinkedList

OR

4. Write a program in Java to implement HashMap.

5. The cost of stock on each day is given in an array A[] of size N. Find all the segments of days on which you buy and sell the stock so that in between those days your profit is maximum.

Note: Since there can be multiple solutions, the driver code will print 1 if your answer is correct, otherwise, it will return 0. In case there's no profit the driver code will print the string "No Profit" for a correct solution.

6. Given a Directed Graph with V vertices (Numbered from 0 to V-1) and E edges, check whether it contains any cycle or not.

Coding Page

```java
package etraveli;
/**
 *  2. Write a Java Program to reverse the letters present in the
given String.
 */

import java.util.Scanner;

public class ReverseString {

        public static void main(String[] args) {
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter a string:");
            String originalString = sc.nextLine();
            String reversedString =
reverseString(originalString);
            System.out.println("Reversed string is:\n" +
reversedString);
        }

        public static String reverseString(String originalString)
{
            String reversedString = "";
            for (int i = originalString.length() - 1; i >= 0; i--
) {
                reversedString += originalString.charAt(i);
            }
            return reversedString;
        }

}
```

Output:

Enter a string:

aryan

Reversed string is:

nayra

Process finished with exit code 0

```java
package etraveli;
/**
 *  4.Write a program in Java to implement HashMap.
 */

import java.util.HashMap;

public class HashMapEg {

        public static void main(String[] args) {

            HashMap<String, Integer> map = new HashMap<String,
Integer>();

            map.put("Aryan", 20);
            map.put("Aditya", 35);
            map.put("Bhakti", 45);

            System.out.println("Bhakti's age is " +
map.get("Bhakti"));

            System.out.println("Keys: " + map.keySet());

            System.out.println("Values: " + map.values());

            System.out.println("Entries: " + map.entrySet());

            map.remove("Aditya");

            if (map.containsKey("Aryan")) {
                System.out.println("Aryan's age is " +
map.get("Aryan"));
            } else {
                System.out.println("Aryan is not in the map.");
            }
        }
    }
```

Output:

Bhakti's age is 45

Keys: [Bhakti, Aditya, Aryan]

Values: [45, 35, 20]

Entries: [Bhakti=45, Aditya=35, Aryan=20]

Aryan's age is 20

Process finished with exit code 0