ASSIGNMENT -4

DATE-5.12.2024

Q1. Write A Java Program Check Whether a String Is Palindrome or not.

Source Code

```
import java.util.Scanner;

public class palin {

   public static boolean ispalin(String str1) {

      // Convert strings to lowercase

      str1 = str1.toLowerCase();

      int start = 0;

      int end = str1.length() - 1;

      while(start < end){

         if(str1.charAt(start) != str1.charAt(end)){

            return false;

         }

         start++;end--;

      }

      return true;    }

   public static void main(String[] args) {

      Scanner sc = new Scanner(System.in);

      System.out.println("Enter your String..");

      String text = sc.nextLine();

      if(ispalin(text))

         System.out.println("The text" + text + "is a Palindrome");

         sc.close();    }}
```

Terminal Output

```
$  javac palin.java

$ java palin

Enter your String..
john
The text john is not a Palindrome

Enter your String..
madam
The text madam is a Palindrome
```

Q2. To print the initials of your name
Input ->John David Smith
Output -> J.D.S

Source Code

```
import java.util.Scanner;
public class initials{
   public static String getInitials(String fullName) {
      // Split the full name into words
      fullName = fullName.toLowerCase();
      String[] name = fullName.split(" ");
      String initials = "";

      // Iterate over each word to extract the first character
      for (String letter : name) {
         if (!letter.isEmpty()) {
            initials = initials + letter.charAt(0) + ".";
         }
      }
      // Remove the trailing space and period
      return initials.toString().toUpperCase();
   }
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter your name..");
      String fullName = sc.nextLine();
      System.out.println("Initials: " + getInitials(fullName));
      sc.close();    }
}
```

Teminal Output

```
$  javac initials.java
$ java initials
        Enter your name..
        John Smith Doe
        Initials: J.S.D.
```