

ASSIGNMENT – 9

Q1. Write a JAVA program to read a string from the key board and print its reverse. Also check whether the string is palindrome or not.

```
import java.util.Scanner;

public class Reversed {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter a string: ");

        String str = sc.nextLine();

        String reversed = "";

        for (int i = str.length() - 1; i >= 0; i--) {

            reversed += str.charAt(i);

        }

        System.out.println("Reversed String: " + reversed);

        if (str == reversed) {

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

        }

        else {

            System.out.println("The string is NOT a Palindrome.");

        }

        sc.close();

    }

}
```

OUTPUT:

```
C:\Users\Padmalya Meher\Desktop\25bcs148>javac Reversed.java

C:\Users\Padmalya Meher\Desktop\25bcs148>java Reversed
Enter a string: Hello everyone
Reversed String: enoyreve olleH
The string is NOT a Palindrome.
```

Q2. Write a JAVA program to capitalize first letter of each word in an inputted sentence from keyboard.

```
import java.util.Scanner;

public class Alphabets {
```

```

public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter a sentence: ");
    String sentence = sc.nextLine();
    String[] words = sentence.split(" ");
    StringBuilder result = new StringBuilder();
    for (String word : words) {
        if (word.length() > 0)
    {
        String capitalized = word.substring(0, 1).toUpperCase() + word.substring(1);
        result.append(capitalized).append(" ");
    }
}
System.out.println("Capitalized Sentence: " + result.toString());
sc.close();
}
}

```

OUTPUT:

```

C:\Users\Padmalya Meher\Desktop\25bcs148>javac Alphabets.java
C:\Users\Padmalya Meher\Desktop\25bcs148>java Alphabets
Enter a sentence: india is great.
Capitalized Sentence: India Is Great.

```

Q3. Write a JAVA program to convert a string into uppercase.

```

import java.util.Scanner;
public class Uppercase {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a string: ");
        String str = sc.nextLine();
        String upper;
        System.out.println("Uppercase String: " + str.toUpperCase());
        sc.close();
    }
}

```

```
}
```

OUTPUT:

```
1 error  
C:\Users\Padmalya Meher\Desktop\25bcs148>javac Uppercase.java  
C:\Users\Padmalya Meher\Desktop\25bcs148>java Uppercase  
Enter a string: I am a student.  
Uppercase String: I AM A STUDENT.
```

Q4. Write a Java program to input a string and print the total number of characters present in the string.

```
import java.util.Scanner;  
  
public class CountCharacters {  
  
    public static void main(String[] args) {  
  
        Scanner sc = new Scanner(System.in);  
  
        System.out.print("Enter a string: ");  
  
        String str = sc.nextLine();  
  
        int length = str.length();  
  
        System.out.println("Total number of characters: " + length);  
  
        sc.close();  
  
    }  
}
```

OUTPUT:

```
C:\Users\Padmalya Meher\Desktop\25bcs148>javac Char.java  
C:\Users\Padmalya Meher\Desktop\25bcs148>java Char  
Enter a string: india is great.  
Total number of characters: 15
```

Q5. Write a java program to replace a substring with another string.

```
import java.util.Scanner;  
  
public class Substring {  
  
    public static void main(String[] args) {  
  
        Scanner sc = new Scanner(System.in);  
  
        System.out.print("Enter the main string: ");  
  
        String mainStr = sc.nextLine();  
  
        System.out.print("Enter the substring to be replaced: ");
```

```

        String oldSub = sc.nextLine();
        System.out.print("Enter the new substring: ");
        String newSub = sc.nextLine();
        String result = mainStr.replace(oldSub, newSub);
        System.out.println("Resulting String: " + result);
        sc.close();
    }
}

```

OUTPUT:

```

C:\Users\Padmalya Meher\Desktop\25bcs148>java Substring
Enter the main string: He is my teacher.
Enter the substring to be replaced: teacher
Enter the new substring: professor
Resulting String: He is my professor.

```

Q6. Write a program that computes your initials from your full name and displays them.

```

import java.util.Scanner;
public class Initials
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter your full name: ");
        String name = sc.nextLine().trim();
        String[] words = name.split();
        StringBuilder initials = new StringBuilder();
        for (String word : words)
        {
            if (!word.isEmpty())
            {
                initials.append(Character.toUpperCase(word.charAt(0)));
            }
        }
        System.out.println("Your initials are: " + initials);
        sc.close();
    }
}

```

OUTPUT:

```
C:\Users\Padmalya Meher\Desktop\25bcs148>javac Initials.java  
C:\Users\Padmalya Meher\Desktop\25bcs148>java Initials  
Enter your full name: Padmalya Meher  
Your initials are: PM
```

Q7. Write a program that receives two strings and check whether they are equal or not.

```
import java.util.Scanner;  
  
public class Strings {  
  
    public static void main(String[] args) {  
  
        Scanner sc = new Scanner(System.in);  
  
        System.out.print("Enter first string: ");  
  
        String str = sc.nextLine();  
  
        System.out.print("Enter second string: ");  
  
        String str1 = sc.nextLine();  
  
        if (str.equals(str1)) {  
  
            System.out.println("The two strings are equal.");  
  
        }  
  
        else {  
  
            System.out.println("The two strings are not equal.");  
  
        }  
  
        sc.close();  
    }  
}
```

OUTPUT:

```
C:\Users\Padmalya Meher\Desktop\25bcs148>javac Strings.java  
C:\Users\Padmalya Meher\Desktop\25bcs148>java Strings  
Enter first string: This is beautiful.  
Enter second string: This is good.  
The two strings are not equal.
```

Name – Padmalya Meher

Sic no. – 25bcs148 (B1)

Date of Experiment – 07/11/2025