Assignment que 1

1.Write a java program to reverse a string without using inbuilt method.

```java
Ans: public class ReverseString {
    public static void main(String[] args) {
        String s= new String("java");
        for(int i=s.length(); i>0;i--){
            System.out.print(s.charAt(i-1));
        }
    }
}
```

2. Write a java program to know whether the given string is palindrome.

```java
Ans: public class CheckPalindrome {
    public static void main(String[] args) {
        String s=new String("naman");
        String s1=new String("");
        for(int i=s.length();i>0;i--) {
            s1 = s1 + s.charAt(i - 1);
        }
        System.out.println(s1);
        if(s.equals(s1)){
            System.out.println("String is Palindrome");
        }
        else {
            System.out.println("String is not Palindrome");
        }

    }
}
```

3. Write a java program to convert upper case to lower case and vice versa.

```java
Ans: public class UpperToLower {
    public static void main(String[] args) {
        String s="PWSKILLS";
        System.out.println(s.toLowerCase());
        System.out.println(s.toUpperCase());
    }
}
```

4.Write a java program to remove a particular character from a String.

Ans:
```java
public class RemoveChar {
    public static String charRemover(String str,int n){
        return str.substring(0,n)+ str.substring(n+1);
    }
    public static void main(String[] args) {
        String str="PWskills";
        System.out.println(charRemover(str,4));



    }
}
```

5.Write a java program to find the index of a substring.

```java
Ans: public class IndexOfSubstring {
    public static void main(String[] args) {
        String s="pwskills";
        String st=s.substring(1,4);
        System.out.println(s.indexOf(st));
    }

}
```

Assignment que 2

1. What is a String in java?
Ans: String is a collection of characters in java.

2. Types of String in java are?
Ans: There are two types of String in java:
    i. Mutable String
    ii. Immutable String

3. In how many ways can you create String object in java?
Ans: There are two ways of creating a String eg String st="pwskills";
    And String st = new String("pwskills");

4. What is a String constant pool?
Ans: String constant pool is a memory area which is used to hold String constants where duplicate data is not allowed.

5.What do you mean by mutable and immutable object?
Ans: mutable object means that object can be changed anywhere inside a program.
    Immutable object means that object cannot be changed once its initialized.

6. Where exactly is the String constant pool located in the memory?
Ans: The String constant pool is located inside the Heap area of the memory.

Assignment que 3

1. What is Mutable String in java Explain with an example?
Ans: Once a string is created and any operation is performed on that string and if the changes get reflected in the same object then that strings are called as Mutable Strings.
    Here's an example of a mutable string :
    StringBuffer sb = new StringBuffer("pwskills");
    sb.append(" student");
    System.out.println(sb);
    OUTPUT: pwskillsstudent

2. WAP to reverse a String?
Ans:
```java
public class RevStr {
    public static void main(String[] args) {
        StringBuffer s = new StringBuffer("PWSKILLS");
        System.out.println(s.reverse());
    }
}
```

3. WAP to reverse the Sentence while preserving the position?
Ans:
```java
public class ReverseSentence {
    public static void main(String[] args) {
        String st1="Think Twice";
        String st2="";
        String arr[]=st1.split(" ");
        for(String s: arr)
        {
            for(int i=s.length()-1;i>=0;i--)
            {
                st2=st2+s.charAt(i);
            }
            st2=st2 +" ";
        }
        System.out.println(st2);
    }
}
```

4.WAP to Sort a string Alphabetically.

```java
Ans: import java.util.Arrays;
class SortString {
    static void sort(String str) {
        char []arr = str.toCharArray();
        Arrays.sort(arr);
        System.out.print(String.valueOf(arr));
    }
    public static void main(String[] args) {
        String s = "zxcvbnmlkjhgfdsapoiuytrewq";
        sort(s);
    }
}
```

Assignment que 4

1.Write a simple String program to take input form user

```java
Ans: import java.util.Scanner;
public class StringInput {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.print("enter the string:");
        String ip=sc.nextLine();
        System.out.println(ip);
    }
}
```

2.How do you concatenate two strings in java? Give an example?
Ans: we can concatenate two strings by '+' operator or by using string.concat() method.
Example: String S1=new String("pw");
S1 = S1.concat("skills");
Ex: String s2= "pw";
        String s2 = "pw"+ "skills";

3. How do you find the length of a string in java explain with example?
Ans: we can find the length of a string by length() method
For example: String s= "pwskills";
System.out.println(s.length());

4.How do you compare two strings in java give an example?
Ans: we compare two string by using == operator which is used to compare the reference of two strings
And equals() method is used to compare the contents of the strings.
For eg. String s = "pwskills";
String s1 = new String("pwskills");
System.out.println(s1==s2);   → false
System.out.println(s1.equals(s2));   → true

5.Write a program to find the length of the string "refrigerator".

```java
Ans: public class LengthOfString {
    public static void main(String[] args) {
        String s="refrigerator";
        System.out.println(s.length());
```

```
        }
}
```

6.Write a program to check if the letter 'e' is present in the word 'Umbrella'.

```
Ans: public class LetterCheck {
    public static void main(String[] args) {
        String s = "Umbrella";
        for(int i=0;i<s.length();i++){
            if('e'==s.charAt(i)){
                System.out.println("yes letter 'e' is present in Umbrella");
                break;
            }
        }
    }
}
```

7.Write a program to delete all consonants from the string "Hello,have a good day".

```
Ans: public class ConsonantDelete {
    public static void main(String[] args) {
        String s= "Hello,have a good day";
        String s2 ="";
        for(int i=0;i<s.length();i++){
            char ch=s.charAt(i);
            if(ch !='a'&&ch!='e'&&ch!='i'&&ch!='o'&&ch!='u'){
                s2=s2+ch;
            }
        }
        System.out.println(s2);
    }
}
```

```
Ans: public class LetterCheck {
    public static void main(String[] args) {
        String s = "Umbrella";
        for(int i=0;i<s.length();i++){
            if('e'==s.charAt(i)){
                System.out.println("yes letter 'e' is present in Umbrella");
```