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

Ans:

```
import java.util.Scanner;

class ReverseString
{
    void revstr()
    {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter string that you want to reverse.");
        String chr=sc.nextLine();
        int lenchr=chr.length();
        System.out.println(lenchr);
        for(int i=(lenchr-1);i>=0;i--)
        {
            System.out.print(chr.charAt(i));

        }

    }
}
class Launch
{
    public static void main(String[]args) {
       ReverseString rs= new ReverseString();
       rs.revstr();


    }
}
```

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

Ans:

```
class Armstrng

{
    public  static void  main(String[]args) {
        String s1="naman";
        StringBuilder s2= new StringBuilder("");
        for(int i=s1.length(); i>0;i--)
        {
            s2=s2.append(s1.charAt(i-1));

        }
        System.out.println("the reverse of the string is : "+s2);
        if(s1.equals(s2))
        {
            System.out.println("the written string is armstrong");
        }
        else
```

```
        {
        System.out.println("the written string is not a armstrong");

        }

    }
}
```

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

Ans:

```
class Conversion
{
    public static void main(String[]args)
    {
        String str="vipin";
        System.out.println("The lower case of string is:"+str.toLowerCase());
        System.out.println("The Upper case of string is:"+str.toUpperCase());



    }
}
```

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

Ans:

```
import java.util.Scanner;

class RmveChr
{
   public static void main(String[]args)
    {
        String str="pwskill";
        System.out.println("This is your string: "+str);
        System.out.println("Which index value you want to remove from this: ");
        Scanner sc=new Scanner(System.in);
        int n=sc.nextInt();
        System.out.println("removed index char is:"+ str.charAt(n));



    }
}
```

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

Ans:

```
import java.util.Scanner;
```

```java
class Rmvestr
{
   public static void main(String[]args)
    {
        String str="pwskill of java";
        System.out.println("This is your string: "+str);
        System.out.println("Which substring you want to remove from this: ");
        Scanner sc=new Scanner(System.in);
        int n=sc.nextInt();
        int m=sc.nextInt();
        System.out.println("removed index char is:"+ str.substring(n,m));



    }
}
```

ASMT:2

1. **What is string in java?**
   Ans : in java string is collection character.
   Java.lang.string class is used to make object of string

2. **Type of string in java?**
   Ans: There are two type of string in java
   1.mutable string
   2. immutable string

3. **In how many way can you create string object in java?**
   Ans: There are two to make string object in java.
   1.using string literal
   2.using new operator
   The string object that are created by using string literal that get stored in string constant pool.
   In another hand the string object that are created by using new operator , that get stored in heap memory.

4. **What is string constant pool?**
   Ans: A string constant pool is a arrangement of heap memory that are using to store the string object that are created by using string literal.
   In string constant pool there are now duplicate are allowed , it means that if the two object hold same data then that not assign another address for another object.
   Also it create a copy of every object that are created in heap memory using **new** operator.
5. **What do you mean by mutable and immutable object in java?**
   Ans: <u>mutable:</u> a mutable objct are those object that can be edit in future when need.
   And in java there are two way to make a mutable object
   1.StringBuffer
   2.StringBuilder

Immutable: a immutable object in java can not be edit in future.
It is constant and its nature is final.

6. **Where exactly is the string constant pool located in the memory?**
   Ans : Inside the heap memory.

ASMT : 3

1. **What is mutable string in java explain with example.**

Ans: mutable: a mutable string are those string that can be edit in future when need.

And in java there are two way to make a mutable string

1.StringBuffer

Eg: StringBuilder s1=new StringBuilder(“vipin”);

S1.append(“ kumar”);

System.out.println(s1);// vipin kumar

2.StringBuilder

Eg: SringBuffer s2=new StringBuffer(“Vipin”);

2. **Wap a program to reverse a string.**

Ans:
```
class StringReverser
{
     public static void main(String[] args)
      {
        String s1="vipin";
        StringBuilder sb=new StringBuilder(s1);
        sb.reverse();
        System.out.println(sb);

    }
}
```

3. **WAP to reverse a sentence while preserving the position**

Ans:
```
import java.util.Scanner;
class StringReturner
{
    public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter string that you want to reverse without changing
its position.");
      String s1=sc.nextLine();
      String sarr[]=s1.split(" ");

      String sb="";
```

```
      for(String elem:sarr)
    {
        for(int i=elem.length()-1;i>=0;i--)
        {
            sb=sb+elem.charAt(i);

        }
        sb=sb+" ";
    }
    System.out.println("result: "+sb);

}
}
```

4. Wap to sort a string by its alphabetical order

Ans:

```
import java.util.Arrays;

public class SortingStr
{
 public static void main(String[] args)
 {
    String str="dcba";
    char strchr[]=str.toCharArray();
    Arrays.sort(strchr);
    System.out.println (new  String(strchr));
 }
}
```

ASMT 4

1.Write a program to print a string entered by the user.

ANS:
```java
import java.util.Scanner;

class InputReceiver
{
    public static void main(String[] args)
     {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter String: ");
        String input=sc.nextLine();

    }
}
```

2. How do you concatenate two strings in Java and give an example?

Ans: we concatenate two string in java by using operator(+)

String str1=”vipin”;

String str2=”kumar”;

String s3=s1+s2;

3.How do you find the length of a string in Java Explain with an example?

Ans: for find the length of an string in java ther are a inbuilt method that’s name is StringVariableName.length()

Example:

String str1=”Vipin kumar Vishwakarma”;

Int len=str1.length();

4. How do you compare two strings in Java?

Ans: In java teo string can be compared by using equal() method.

Example…

String str1=”hii”;

String str2=”hii”;

```
If(str1.equal(str2)
{
System.out.println(“yes”);
}
Else
{
System.out.println(“no”);

}
```

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

```
public class FindLength
{
    public static void main(String[] args)
    {
        String s1="refrigerator";
        int len=s1.length();
        System.out.println(len);

    }
}
```

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

```
class CheckingChar{
public static void main(String[] args){
String a = "Umbrella";boolean per = false;
for(int i = 0;i<a.length();i++){
if(a.charAt(i) == 'e'){

per=true;
break;
}

}
System.out.println(per);
}
}
```

6. Write a program to delete all cons

from the string "Hello,have a good day". (Take input from user)

ans:
```java
import java.util.Scanner;

class delete
{
    public static void main(String[] args)
     {
        Scanner sc=new Scanner(System.in);
        System.out.println("hey user enter a string: ");
        String s1=sc.nextLine();
        StringBuilder sb=new StringBuilder("");

        for(int i=0;i<s1.length();i++)
        {
            if(s1.charAt(i)=='a'||s1.charAt(i)=='A'||s1.charAt(i)=='e'||s1.charAt(i
)=='E'||s1.charAt(i)=='I'||s1.charAt(i)=='i'||
            s1.charAt(i)=='o'||s1.charAt(i)=='O'||s1.charAt(i)=='u'||s1.charAt(i)==
'U')
            {
                sb=sb.append(s1.charAt(i));
            }
            else
            {
                continue;
             }
        }
        System.out.println(sb);
        }



    }
```