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Practical No.1

AIM: Design a program to create a machine which counts number of 1's and 0's in the String.

CODE:

```
import java.util.Scanner;
import java.util.ArrayList;
public class Design{
             String str;
             char b2;
             int len;
             int comp=0;
             ArrayList aL=new ArrayList();
             ArrayList bL=new ArrayList();
             void initial()
             {
                    System.out.println("Input strings of 1 and 0\n");
                    Scanner obj=new Scanner(System.in);
                    str=obj.nextLine();
                    len=str.length();
                    if(len>0)
                    {
                          for (int i=0;i<str.length();i++)</pre>
                          {
                                 char b1=str.charAt(i);
                                 if(b1=='1'||b1=='0')
                                 {
                                 }
```

```
else
                                {
                                      System.out.println("please porvide valid
string");
                                      System.exit(0);
                               }}
            first();
            }
      }
void first()
{
      if(comp<len)
            {
                   char a1=str.charAt(comp);
                   if (a1=='1')
                   {
                         comp++;
                         aL.add("A");
                         first();
                   }
                   else
                   {
                         comp++;
                         bL.add("B");
                         first();
                   }
      }
            else
      {
```

```
System.out.println("TOtal count of 1 in the string: "+aL.size());

System.out.println("\n Total count of 0 in the string: "+bL.size());

}

public static void main(String[]args)

{

Design d1=new Design();

d1.initial();

}}
```

OUTPUT:

```
C:\Users\ADMIN\Documents\Custom Office Templates>java Design
Input strings of 1 and 0
0
TOtal count of 1 in the string: 0
Total count of 0 in the string: 1
```