**Name:-Rudra.Gore**

**Roll.no:-219**

**Practical No:3**

**Aim:** Design a program to accept the string that ends with 101**.**

**Code:**

import java.util.Scanner; public class Design { String str; char br; int len; int comp=0; 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++){ char b1=str.charAt(i); if(b1=='1'||b1=='0'){

} else

{

System.out.println("Please provide valid string");

System.exit(0);

} } first();

} } void first()

{ if(comp<len)

{

char a1=str.charAt(comp);

if(a1=='1')

{ comp++; second(); } else

{ comp++; first();

} } else

{

System.out.println("not a valid string");

} } void second()

{ if(comp<len)

{

char a1=str.charAt(comp); if(a1=='0') { comp++; third(); } else { comp++; second();

} } else{

System.out.println("Not a valid String");

} } void third() { if(comp<len)

{

char a1=str.charAt(comp);

if(a1=='1') { comp++; last(); } else{ comp++; first();

} } else{

System.out.println("Not a valid string");

} } void last() { if (comp<len) { char a1=str.charAt(comp); if(a1=='1') { comp++; second();

} else{ comp++; third();

}

} else{

System.out.println("Sring will be accepted");

System.exit(0);

} }

public static void main(String[] args) { Design d1 = new Design(); d1.initial();

}

}

**Output:**

