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Practical 03

**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:**

