**4. Run Length Encoding**

Given a string, Your task is to  complete the function **encode** that returns the **run length encoded**string for the given string.  
**eg** if the input string is “wwwwaaadexxxxxx”, then the function should return “w4a3d1e1x6″.  
You are required to complete the function **encode** that takes only one argument the string which is to be encoded and returns the encoded string.

import java.util.\*;

class RLEncoding

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int T = sc.nextInt();

sc.nextLine();

while(T>0)

{

String str = sc.nextLine();

GfG g = new GfG();

System.out.println(g.encode(str));

T--;

}

}

}

**class GfG**

**{**

**String encode(String str)**

**{**

**//Your code here**

**String des="";**

**for(int i=0;i<str.length();i++){**

**des+=str.charAt(i);**

**int c=1;**

**while(i+1<str.length() && str.charAt(i)==str.charAt(i+1)){**

**c++;**

**i++;**

**}**

**des+=c+"";**

**}**

**return des;**

**}**

**}**