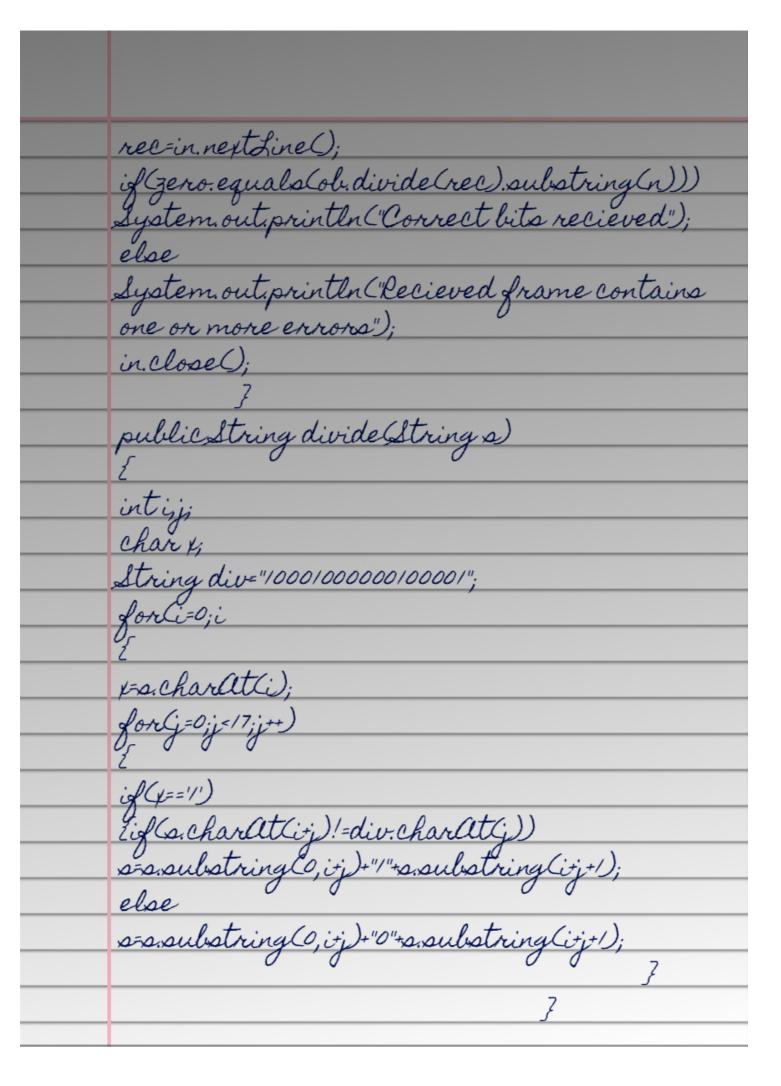1BM18CS077

Rahul Patil

CN lab

```java
import java.util.*;
public class Crc
{
public static int n;
public static void main(String[] args)
{
Scanner in=new Scanner(System.in);
Crc ob=new Crc();
String code, copy, rec,zero="0000000000000000";
System.out.println("Enter message");
code=in.nextLine();
n=code.length();
copy=code;
code+=zero;
code=ob.divide(code);
System.out.println("Message="+copy);
copy=copy.substring(0,n)+code.substring(n);
System.out.println("CRC=");
System.out.println(code.substring(n));
System.out.println("transmitted frame is
"+copy);
System.out.println("Enter recived data");
```

```java
rec=in.nextLine();
if(zero.equals(ob.divide(rec).substring(n)))
System.out.println("Correct bits recieved");
else
System.out.println("Recieved frame contains
one or more errors");
in.close();
        }
public String divide(String s)
{
int i,j;
char x;
String div="100010000010001";
for(i=0;i
{
x=s.charAt(i);
for(j=0;j<17;j++)
{
if(x=='1')
{if(s.charAt(i+j)!=div.charAt(j))
s=s.substring(0,i+j)+"1"+s.substring(i+j+1);
else
s=s.substring(0,i+j)+"0"+s.substring(i+j+1);
            }
        }
```

```
}
    return s;
        }
}
```