

Program - 2

```
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";
        String zero = "0000000000000000";
        System.out.print("Enter poly : ");
        code = in.nextLine();
        n = code.length();
        copy = code;
        code += zero;
        code = ob.divide(code);
S.O.P( "Gen
        copy = copy.substring(0, n) + code.substring(n);
        S.O.P("CRC" = " + code.substring(n));
        S.O.P(" Transmitted : " + copy);
        S.O.P(" Enter received code: ");
        rec = in.nextLine();
        if (zero.equals(ob.divide(rec).substring(n)))
            S.O.P("Correct bits received");
        else
            S.O.P("error");
    }
}
```

```
public String divide (String s)
```

```
{
```

```
    int i, j;
```

```
    char n;
```

```
    div = "10001000000100001";
```

```
    for (i = 0; i < n; i++)
```

```
    {
```

```
        x = s.charAt(i);
```

```
        for (j = 0; j < 17; j++)
```

```
            if (n == '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;
```

```
}
```

```
}
```