

Program 7 CRC

```
import java.util.Scanner;
class CRC {
public static void main(String args[]) {
int m,g[],n,d[],z[],r[],msb,i,j,k;
n=sc.nextInt();
System.out.print("Enter no. of generator
bits : ");
m=sc.nextInt();
d=new int[n+m];
g=new int[m];
System.out.print("Enter data bits : ");
for(i=0;i<n;i++)
d[i]=sc.nextInt();
System.out.print("Enter generator bits :
");
for(j=0;j<m;j++)
d[n+j]=0;
r=new int[m+n];
for(i=0;i<m;i++)
r[i]=0;
for(i=0;i<m;i++)
z[i]=0;
for(i=0;i<n;i++)
{ k=0;
msb=r[i];
for(j=i;j<m+1;j++)
{ if(msb==0) r[j]=xor(r[j],z[k]);
else
r[j]=xor(r[j],g[k]);
k++;
}
r[n+i]=d[n+i];
}
System.out.print("The code bits added
are : ");
for(i=n;i<n+m-1;i++)
```

```
{
d[i]=r[i];
System.out.print(d[i]);
}
System.out.print("\nThe code data is : ");
for(i=0;i<n+m-1;i++){
System.out.print(d[i]);
} }
public static int xor(int x,int y) {
if(x==y) return(0);
else
return(1);
} }
```