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writeup.

IBMICS090

Batch - B3

```
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; int sec, zero = "0000000000000000";
```

```
        System.out.println("Enter message");  
        code = in.nextLine();
```

```
        n = code.length();
```

```
        copy = code;
```

```
        code += zero;
```

```
        code = ob.divide(code);
```

```
        S.O.Plm("Message = " + copy);
```

```
        copy = copy.substring(0, n) + code.substring(n);  
        S.O.Plm("CRC = ");
```

```
        S.O.Plm(code.substring(n));
```

```
        S.O.Plm("Transmitted frame is " + copy);
```

```
        S.O.Plm("Enter received data");
```

```
        sec = in.nextLine();
```



```
if (zero.equals (ob. divide (rec). subString (n)))  
    S.O.Pm ("Correct bits received");
```

```
else  
    S.O.Pm ("Received frame containing one  
    or more errors");  
    m.close();
```

```
}  
public String divide (String s)  
{
```

```
    int i, j;  
    char x;  
    String div = "10001000000010001";
```

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

```
            }  
        }  
    }
```

```
    s = s.substring (0, i+j) + "0" + s.substring (i+j+1);  
    } } }
```

```
    return s;
```

```
}
```

```
}
```