

OBSERVATION

17/8/23

LAB-10

Write a program for XOR's deleting code using C++

Code

```
import java.util.Scanner;
import java.util.Arrays;
```

```
class Program
{
```

```
    static String xor(String a, String b){
```

```
        String result = "";
```

```
        int n = b.length();
```

```
        for(int i = 1; i < n; i++)
```

```
        {
```

```
            result = (a.charAt(i) == b.charAt(i)) ? "" :
```

```
                y
```

```
            return result;
```

```
        }
```

```
    static String find(String data, String key){
```

```
    {
```

```
        int pick = key.length();
```

```
        String temp = data.substring(0, pick);
```

```
        int n = data.length();
```

```
        while (pick < n)
```

```
        {
```

```
            if (temp.charAt(0) == data.charAt(pick))
```

```

tmp = xor(date, tmp) + date.charAt(pick);
else
    tmp = xor(new String(new char[pick]).
        replace("10", "0"), tmp) + date.charAt(pick);
    pick++;
}

```

```

if (tmp.charAt(0) == '1')
    tmp = xor(key, tmp);
else
    tmp = xor(new String(new char[pick]).
        replace("10", "01"), tmp);
    return tmp;
}

```

```

static void Encode(String date, String key)
{
    int lkey = key.length();
    String ad = (date + new String(new char[lkey]).
        replace("10", "01"));
    String remainder = modDiv(ad, key);
    String codeword = date + remainder;
    System.out.println("Remainder: " + remainder);
    System.out.println("Encoded Date (Date+Remainder) : " + codeword + "\n");
}

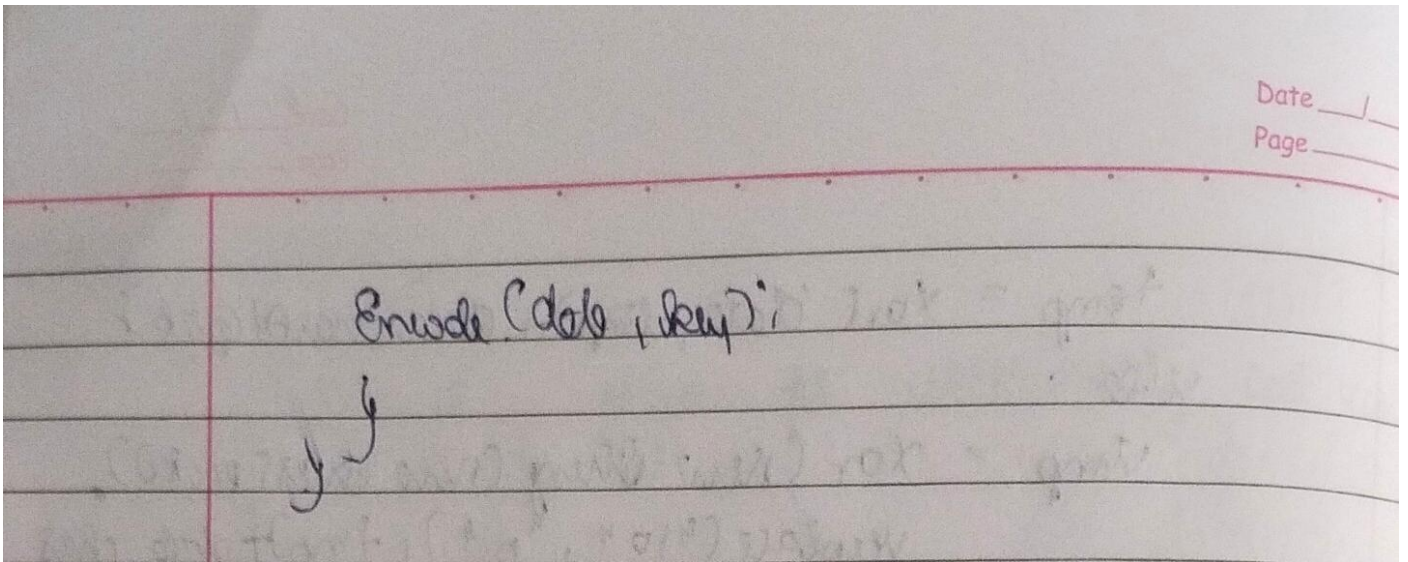
```

```

public static void main(String args[])
{
    Scanner s = new Scanner(System.in);
    System.out.print("Enter date word & key\n");
    String date = s.next();
    String key = s.next();
}

```





## OUTPUT

```
C:\Users\sanja\OneDrive\Desl  X  +  v
Enter the dataword
1 0 1 1 0 0 1 1 1 1 0 0 1 0 1 1 1
Enter dividend
1 0 0 0 1 0 0 0 0 0 0 0 1 0 0 1 1
1
Codeword: 1011001111001011100000000000011011
At receiver end
Codeword: 1011001111001011100000000000000000
Process returned 1 (0x1)  execution time : 53.976 s
Press any key to continue.
|
```