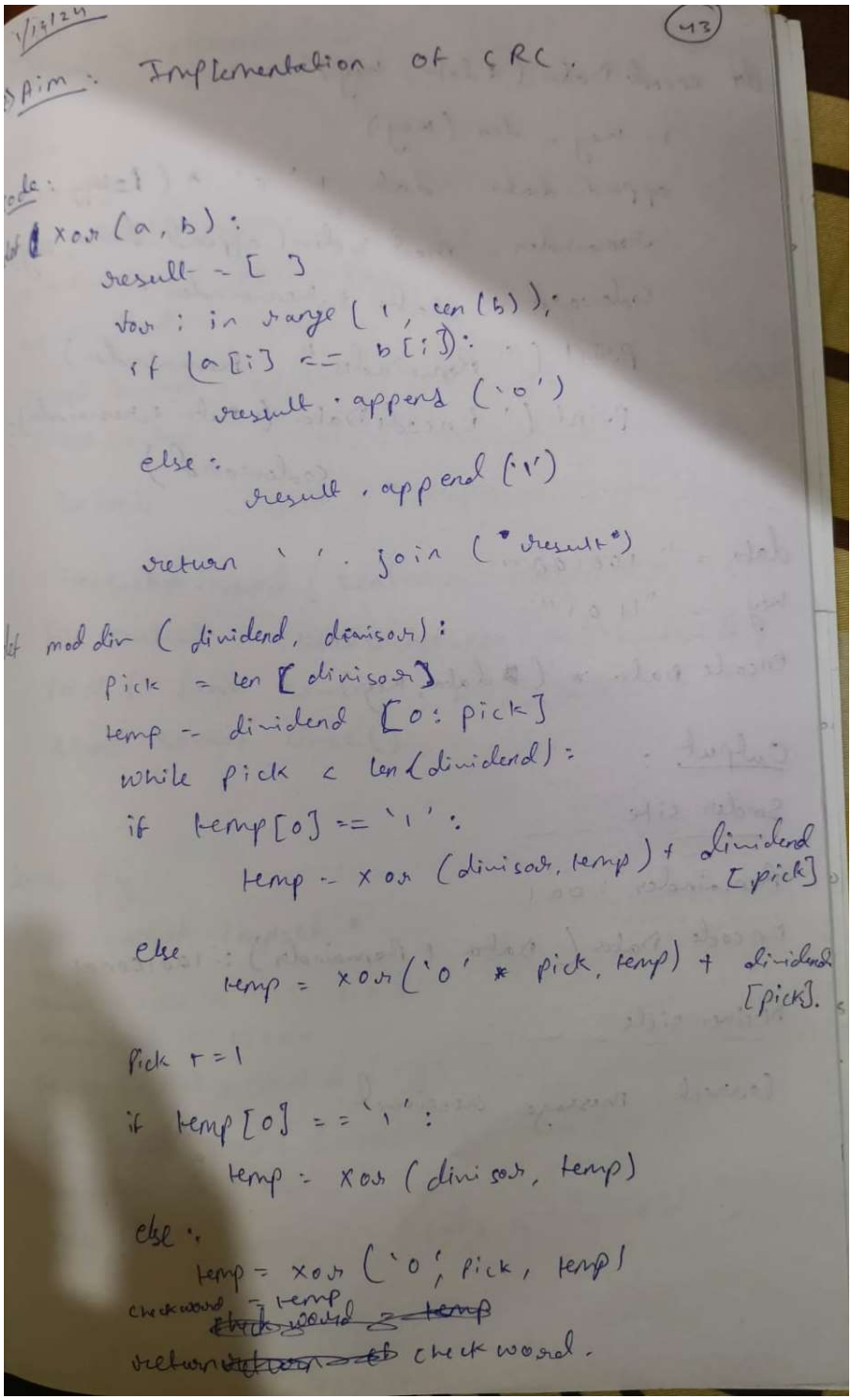
PART-B

Program 14

Write a program for error detecting code using CRC-CCITT (16-bits).

Code :



```
def encodeData(data, key):
    l_key = len(key)
    append_data = data + '0' * (l_key - 1)
    remainder = mod2div(append_data, key)
    codeword = data + remainder
    print("Remainder", remainder)
    print("Encode Data (Data + remainder):",
          codeword)

data = "100100"
key = "1101"
encodeData(data, key)
```

Output :

Sender site ---

Remainder : 001

Encode Data (Data + Remainder) : 100100001

Receiver side ---

Correct message received.

Output

```
Enter data: 1100110
Enter generator polynomial: 1101
CRC: 100
Transmitted Data: 1100110100
Enter received data: 1100110100
No Error

=== Code Execution Successful ===
```