ERROR DETECTION WITH CRC METHOD

CLIENT:

```
import socket
s=socket.socket()
host=socket.gethostname()
port=12343
s.connect((host,port))
dataword=int(input('Enter the Dataword:'))
divisor=int(input('Enter the divisor:'))
divident=int(dataword*1000)
main_divident=[]
main_divisor=[]
divident1=int(divident)
divisor1=int(divisor)
l=0

while divident1>0:
   x=int(divident1%10)
   main_divident.append(x)
   divident1=int(divident1/10)
   l=l+1;



while divisor1>0:
   x=int(divisor1%10)
   main_divisor.append(x)
   divisor1=int(divisor1/10)

main_divident.reverse()
```

```
main_divident1=main_divident
main_divisor.reverse()
print(main_divident)
print(main_divisor)
lm=len(main_divisor)
l=l-3
for i in range(l):
    if(main_divident[i]==1):
        k=i
        for j in range(lm):
            main_divident[k+j]=main_divident[k+j]^main_divisor[j]

for i in range (3):
    dataword=dataword*10 + main_divident[l+i]



print('Dataword to be Sent is:'+ str(dataword))


s.send(str(dataword).encode())
s.send(str(divisor).encode())
```

SERVER

```
import socket
s=socket.socket()
host=socket.gethostname()
port=12343
s.bind((host,port))
s.listen(5)
c,addr=s.accept()
```

```
print('Got Connection From'+str(addr))

dataword=c.recv(1024).decode()
print('Dataword received is:'+dataword)
divisor=c.recv(1024).decode()

#Division
divident=dataword
main_divident=[]
main_divisor=[]
divident1=int(divident)
divisor1=int(divisor)
l=0

while divident1>0:
   x=int(divident1%10)
   main_divident.append(x)
   divident1=int(divident1/10)
   l=l+1;



while divisor1>0:
   x=int(divisor1%10)
   main_divisor.append(x)
   divisor1=int(divisor1/10)

main_divident.reverse()
main_divident1=main_divident
main_divisor.reverse()
#print(main_divident)
#print(main_divisor)
```

```
lm=len(main_divisor)
l=l-3
for i in range(l):
    if(main_divident[i]==1):
        k=i
        for j in range(lm):
            main_divident[k+j]=main_divident[k+j]^main_divisor[j]

syndrome=[]

for i in range (3):
    syndrome.append(main_divident[l+i])

print(syndrome)
```