*#binary="1011010110101110"*

**def** sender(**k**)->*str*:

    binary**=**input("Enter the input: ")

    x**=**binary[0:8]

    y**=**binary[8:]

    l**=**[]

**for** i **in** range(0,len(binary),8):

        part**=**binary[i:i**+**8]

        l.append(part)

    print("Data after dividing it into list is: "**+**str(l))

    check\_sum**=**bin(int(x,2)**+**(int(y,2)))

    check\_sum**=**(check\_sum[2:])

    print("Check sum is: "**+**check\_sum)

    check**=**[]

**for** i **in** check\_sum:

**if**(i**==**"0"):

            check.append("1")

**else**:

            check.append("0")

*# print("Complement of checksum is: "+str(check))*

    chksum**=**"".join(check)

    print("Complement of checksum is: "**+**str(chksum))

**return** chksum

**def** reciever(**k**,**chksum**):

    user\_data**=**input("Enter data recieved from server: ")

    x**=**user\_data[:8]

    y**=**user\_data[8:]

    summ**=**str(bin(int(x,2)**+**(int(y,2))))

    summ**=**summ[2:]

    print("Sum at reciever side of data is: "**+**summ)

    check\_sum**=**bin(int(x,2)**+**(int(y,2))**+**(int(chksum,2)))

    check\_sum**=**check\_sum[2:]

**if**(len(check\_sum)**==**9):

        check\_sum**=**check\_sum[1:]

    print("Sum with checksum and data is: "**+**check\_sum)

**if**(int(check\_sum)**==**11111111):

        print("The code is error free")

**else**:

        print("There is error in the code")

**if** \_\_name\_\_**==**"\_\_main\_\_":

    chksum**=**sender(8)

    reciever(8,chksum)



