**CHECKSUM**

Input:

def add(a,b):

s = ['0']\*8;c = 0;x = 0,

for i in range(7,-1,-1):

x = int(a[i]) + int(b[i]) + c

if x == 0:

s[i] = '0'

c = 0

elif x == 1:

s[i] = '1'

c = 0

elif x == 2:

s [i] = '0'

c = 1

elif x == 3:

s [i] = '1'

c = 1

sum = "".join(s)

if c == 1:

print(' ',sum,' -------> Carry is 1')

print('+ 1')

print('------------')

sum = add(sum,'00000001')

return sum

def compliment(sum):

sum = sum.replace('0','2')

sum = sum.replace('1','0')

return sum.replace('2','1')

def checksum(t):

sum = t[0]

for i in range(1,len(t)):

print('\nBinary Addition :')

print(' ',sum)

print('+',t[i])

print('------------')

sum = add(sum,t[i])

print('sum = ',sum)

sum = compliment(sum)

print('\nChecksum = ',sum)

return sum

s = input('string: ')

t =[]

for i in s:

t.append(bin(ord(i)).replace("0b", "").zfill(8))

t.append('00000000')

print(t)

sum = checksum(t)

if input('Do u want to enter error? ') == 'y':

t[-1] = input('enter error : ')

sum = checksum(t)

else :

t[-1] = sum

sum = checksum(t)

if sum == '00000000':

print('No Error found.')

else:

print('Error Occured.')

**OUTPUT:**







