MESSAGE ENCODE AND DECODE

In [1]:

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##importing mmodules

from tkinter import *
import base64

#initialize window
root = Tk()
root.geometry('500x300')
root.resizable(0,0)

#title of the window
root.title("Python Developer - Message Encode and Decode")

#label
Label(root, text ='ENCODE DECODE', font = 'arial 20 bold').pack()
Label(root, text ='PYTHON', font = 'arial 20 bold').pack(side =BOTTOM)

#define variables
Text = StringVar()
private_key = StringVar()
mode = StringVar()
Result = StringVar()

#function to encode

def Encode(key,message):
    enc=[]
    for i in range(len(message)):
        key_c = key[i % len(key)]
        enc.append(chr((ord(message[i]) + ord(key_c)) % 256))

    return base64.urlsafe_b64encode("".join(enc).encode()).decode()

#function to decode

def Decode(key,message):
    dec=[]
    message = base64.urlsafe_b64decode(message).decode()
    for i in range(len(message)):
        key_c = key[i % len(key)]
        dec.append(chr((256 + ord(message[i])- ord(key_c)) % 256))

    return "".join(dec)

#function to set mode
def Mode():
    if(mode.get() == 'e'):
        Result.set(Encode(private_key.get(), Text.get()))
    elif(mode.get() == 'd'):
        Result.set(Decode(private_key.get(), Text.get()))
    else:
        Result.set('Invalid Mode')

#Function to exit window

def Exit():
    root.destroy()

#Function to reset
def Reset():
    Text.set("")
    private_key.set("")
    mode.set("")
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    Result.set("")

#Message
Label(root, font= 'arial 12 bold', text='MESSAGE').place(x= 60,y=60)
Entry(root, font = 'arial 10', textvariable = Text, bg = 'ghost white').place(x=290, y =
60)

#key
Label(root, font = 'arial 12 bold', text ='KEY').place(x=60, y = 90)
Entry(root, font = 'arial 10', textvariable = private_key , bg ='ghost white').place(x=2
90, y = 90)

#mode
Label(root, font = 'arial 12 bold', text ='MODE(e-encode, d-decode)').place(x=60, y = 12
0)
Entry(root, font = 'arial 10', textvariable = mode , bg= 'ghost white').place(x=290, y =
120)

#result
Entry(root, font = 'arial 10 bold', textvariable = Result, bg ='ghost white').place(x=29
0, y = 150)

#result button
Button(root, font = 'arial 10 bold', text = 'RESULT',width =6 ,padx =2,bg ='LightGray' ,
command = Mode).place(x=60, y = 150)

#reset button
Button(root, font = 'arial 10 bold' ,text ='RESET' ,width =6, command = Reset,bg = 'Lime
Green', padx=2).place(x=80, y = 190)

#exit button
Button(root, font = 'arial 10 bold',text= 'EXIT' , width = 6, command = Exit,bg = 'Orang
eRed', padx=2, pady=2).place(x=180, y = 190)
root.mainloop()
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In [ ]:

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