import mysql.connector

import pickle as le

from cryptography.fernet import Fernet

import base64

def generate\_key(P) :

while len(P)!=32:#this is only there as Fernet key must be 32 base64-encoded bytes

if len(P)<32:

P+=P[::-1]

elif len(P)>32:

P=P[0:32]

return base64.urlsafe\_b64encode(P.encode('utf-8'))\

def enc(msg):#for encrypting

fernet = Fernet(generate\_key(Pass))

return fernet.encrypt(msg.encode())

def dec(msg):#for decrypting

fernet = Fernet(generate\_key(Pass))

return fernet.decrypt(msg).decode()

def SetUp():

with open('user.dat','wb+') as f:

global Pass

while 1:

P=input('create a strong password(min 4 char max 32): ')

if (len(P)>3) and (len(P)<=32):

Pass=P

le.dump(enc(P),f)

break

else:

print('PASSWORD SHOULD BE WITHIN 4-32 CHARACTERS')

def LogIn():

f= open('user.dat','rb')

global Pass

j=le.load(f)

for i in range(5):

ip=Pass=input('enter password: ')

try:

ap=dec(j)

except:

print('incorrect password','\nattemps remaining',5-i);continue

if ap==ip:

print('access granted')

Pass= ip

f.close()

return True

else:

print('ACCESS DENIED');f.close()

return False

def SavePass():

while 1:

while 1:

app=input('Enter name of application/website/organisation: ')

if len(app)>0:

break

print('INVALID INPUT \n this field cant be left empty')

Uname=input('enter username used: ')

while 1:

mail=input('enter mailid : ')

if ('@' in mail) and ('.' in mail):

break

print('INVALID EMAIL ADRESS')

while 1:

AppPass=input('enter account password: ')

if len(AppPass)>0:

break

print('INVALID INPUT \n this field cant be left empty')

try:

k=input('Input name of app to update: ')

cursor.execute("SELECT \* FROM data where app = 'app'")

print('INVALID INPUT: app already exists, try a different app name \n')

except:

sql="insert into data values(%s, %s, %s, %s);"

val=(app,enc(Uname),enc(mail),enc(AppPass))

cursor.execute(sql,val)

connector.commit()

break

def GetPass():

cursor.execute("SELECT \* FROM data")

print('~'\*4,'Saved accounts','~'\*4);x=1

for i in cursor.fetchall():

print(x,'-',i[0],'| username:',dec(i[1]));x+=1

while 1:

try:

cursor.execute("SELECT \* FROM data where app = %s",(input('Input name of app: '),))

break

except:

print('INVALID INPUT')

y=cursor.fetchone()

print('Email:',dec(y[2]),'\nPASS:',dec(y[3]))

def Update():

cursor.execute("SELECT \* FROM data")

print('~'\*4,'Saved accounts','~'\*4);x=1

for i in cursor.fetchall():

print(x,'-','App name: ',i[0],'| username:',dec(i[1]));x+=1

while 1:

try:

k=input('Input name of app to update: ')

cursor.execute("SELECT \* FROM data where app = %s",(k,))

break

except:

print('INVALID INPUT')

y=cursor.fetchone()

print('1-Username:',dec(y[1]),'\n2-Email:',dec(y[2]),'\n3-PASS:',dec(y[3]))

q=input("what would u like to update 1, 2, 3 or any other key to exit: ")

if (q)=='1':

Uname=input('enter new username: ')

cursor.execute("UPDATE data SET Uname = '"+enc(Uname).decode()+"\' WHERE app = \'"+k+"\'")

elif (q)=='2':

while 1:

mail=input('enter mailid : ')

if ('@' in mail) and ('.' in mail):

break

print('INVALID EMAIL ADRESS')

cursor.execute("UPDATE data SET email = '"+enc(mail).decode()+"\' WHERE app = \'"+k+"\'")

elif (q)=='3':

while 1:

AppPass=input('enter account password: ')

if len(AppPass)>0:

break

print('INVALID INPUT \n this field cant be left empty')

cursor.execute("UPDATE data SET AppPass = '"+enc(AppPass).decode()+"\' WHERE app = \'"+k+"\'")

connector.commit()

def DelPass():

cursor.execute("SELECT \* FROM data")

print('~'\*4,'Saved accounts','~'\*4);x=1

for i in cursor.fetchall():

print(x,'-','App name: ',i[0],'| username:',dec(i[1]));x+=1

ac=input('Input name of app: ')

if input('ARE YOU SURE YOU WANT TO PERMANENTLY DELETE THE PASSWORD?(y to continue)').lower()=='y':

cursor.execute("delete FROM data where app= %s;",(ac,))

print(cursor.rowcount, "record(s) deleted")

connector.commit()

connector = mysql.connector.connect(

host="localhost",

database='passmgr',

user="root",

password="Mysql"

)

cursor = connector.cursor()

Pass=''

try:

IsloggedOn=LogIn()

except:

SetUp()

IsloggedOn=True

while IsloggedOn :

print('WELCOME BACK!\n','~'\*15+' MENU '+'~'\*15)

ch=input('''press

1-To save new password

2-To retrieve password for an account

3-To update password or other details for an account

4-delete password for an account

: ''')

if ch=='1':

SavePass()

if input('to continue enter "y" or any other key to exit: ').lower()!='y':

IsloggedOn=False

elif ch=='2':

GetPass()

if input('to continue enter "y" or any other key to exit: ').lower()!='y':

IsloggedOn=False

elif ch=='3':

Update()

if input('to continue enter "y" or any other key to exit: ').lower()!='y':

IsloggedOn=False

elif ch=='4':

DelPass()

if input('to continue enter "y" or any other key to exit: ').lower()!='y':

IsloggedOn=False

else:

print('INVALID INPUT')

if input('to continue enter "y" or any other key to exit: ').lower()!='y':

IsloggedOn=False