السؤال الأول :

الطلب A :

```
number = eval(input("enter a number :"))#asking user to type a number
if(number >= 0):                        #test if number inserted is positive
    print("the number is positive")
else:                                 #else the number is negative
    print ("the number is negative")
```

```
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_1\A.py =========
enter a number :6
the number is positive
>>>
```

```
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_1\A.py =========
enter a number :-6
the number is negative
>>>
```

الطلب B :

```
number1 =eval (input ("enter the first number : "))
number2 =eval (input ("enter the second number : "))
process =input ("enter the process(*,/,+,-):") # ask user to type process
# test what process to do
if (process=='*') :
    print (number1*number2)
elif (process=='/') :
    print (number1/number2)
elif (process=='+') :
    print(number1+number2)
else :
    print(number1-number2)
```

```
========== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_1\B.py ==
enter the first number : 2
enter the second number : 6
enter the process(*,/,+,-):*
12
>>>
```

الطلب C :

```
grad_students = ["Ali" ,"Ahmad" ,"Suzan" ,"Rama" ,"Basel" ,"Batoul" ,"Muhannad"]
student_name = input("enter student name : ")
# test if student is graduated or not
if student_name in grad_students :
 print(student_name,"is graduated")
else :
 print(student_name,"not graduated")
```

```
========== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_1\C.py =
enter student name : Basel
Basel is graduated
>>>
```

الطلب D :

```
odd_num =[num for num in range (101) if num%2==1]
print(odd_num)
```

```
>>>
========== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_1\D.py =========
[1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41,
43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81,
83, 85, 87, 89, 91, 93, 95, 97, 99]
>>>
```

الطلب E :

```
words=["Network","Math","Programming ","Physics","Music"]
Max_word='Network'
for x in words :
    if len(x)>len (Max_word):
        Max_word=x
print("the longest word is :"+Max_word)
```

```
========== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_1\E.py ========
the longest word is :Programming
>>>
```

السؤال الثاني :

```
n = int(input('please enter the number in decimal format: '))
x = n
k = []   #list where binary number will be added
while (n>0):
    a = int(float(n%2))
    k.append(a)
    n = (n-a)/2
k.append(0)
string=""
for j in k[::-1]:
    string = string+str(j)
print('The binary number for %d is %s'%(x, string))
```

```
please enter the number in decimal format: 46
The binary number for 46 is 0101110
>>>
```

السؤال الثالث :

```
import pickle
while True :
    operation = input("enter tu for translator user or enter td for translator deveolper or enter exit ")
    if operation == 'exit' :
        print("you have enterd exit")
        break
    elif operation =='tu':
        eng_word = input("enter English word for translation")
        file_name=r"C:\Users\Basel.ICT\Desktop\Assignment1\translation.pkl"
        in_file=open(file_name,'rb')
        dictonary_content=pickle.load(in_file)
        print('the translation for :',eng_word,'is :',dictonary_content[eng_word])
        in_file.close()
    elif operation == 'td':
        file_name = r"C:\Users\Basel.ICT\Desktop\Assignment1\translation.pkl"
        in_file = open(file_name, 'rb')
        dictonary_content = pickle.load(in_file)
        in_file.close()
        eng_word  = input("enter english word")
        arab_word = input("enter arabic word")
        dictonary_content[eng_word] = arab_word
        in_file=open(file_name,'wb')
        pickle.dump(dictonary_content,in_file)
        in_file.close()
    else :
        print ("you have entered wrong text ")
```

السؤال الرابع :

```
#Here is the bank class
class bank():
    account_num=0
    def __init__(self,fname,lname,profit,amount,phone_n):
        self.fname  =  fname
        self.lname  =  lname
        self.profit  =  profit
        self.amount = amount
        self.phone_n  =  phone_n
        bank.account_num+=1
        print("creating new account")
    def getfullname(self):
        return self.fname + " " +self.lname
    def info (self):
        return ('name : '+self.fname + '  '+self.lname+' amount '+str(self.amount)+' profit :'+str(self.profit)+' phone number '+str(self.phone_n))
    def setprofit(self,profit):
        self.profit=profit
    def get_account_num(cls):
        return 'the number of accounts'+cls.account_num

#Here is the s_bank class
class s_bank(bank):
    syr_account_num=0
    def __init__(self,fname,lname,profit,amount,phone_n,syrian_id):
        super().__init__(fname,lname,profit,amount,phone_n)
        self.syrian_id=syrian_id
        s_bank.syr_account_num+=1
        print("creating a new account")
    def info (self):
        return('name : '+self.fname + '  '+self.lname+' amount '+str(self.amount)+' profit :'+str(self.profit)+ \
               ' phone number '+str(self.phone_n)+' syrian ID : '+str(self.syrian_id))
    def get_account_num(cls):
        return 'the number of s_accounts'+cls.syr_account_num
def main():
    user1=bank('Ali','Hasan',30,300,925412563225)
    print(user1.info())
    user2=s_bank('Basel','Abras',97,'150',936251425878,20)
    print(user2.info())
if __name__=='__main__':
    main()
```

```
===== RESTART: C:\Users\Basel.ICT\Desktop\1 وظيفة\Question_4\Question_4.py =====
creating new account
name : Ali  Hasan amount 300 profit :30 phone number 925412563225
creating new account
creating a new account
name : Basel  Abras amount 150 profit :97 phone number 936251425878 syrian ID :
20
>>>
```