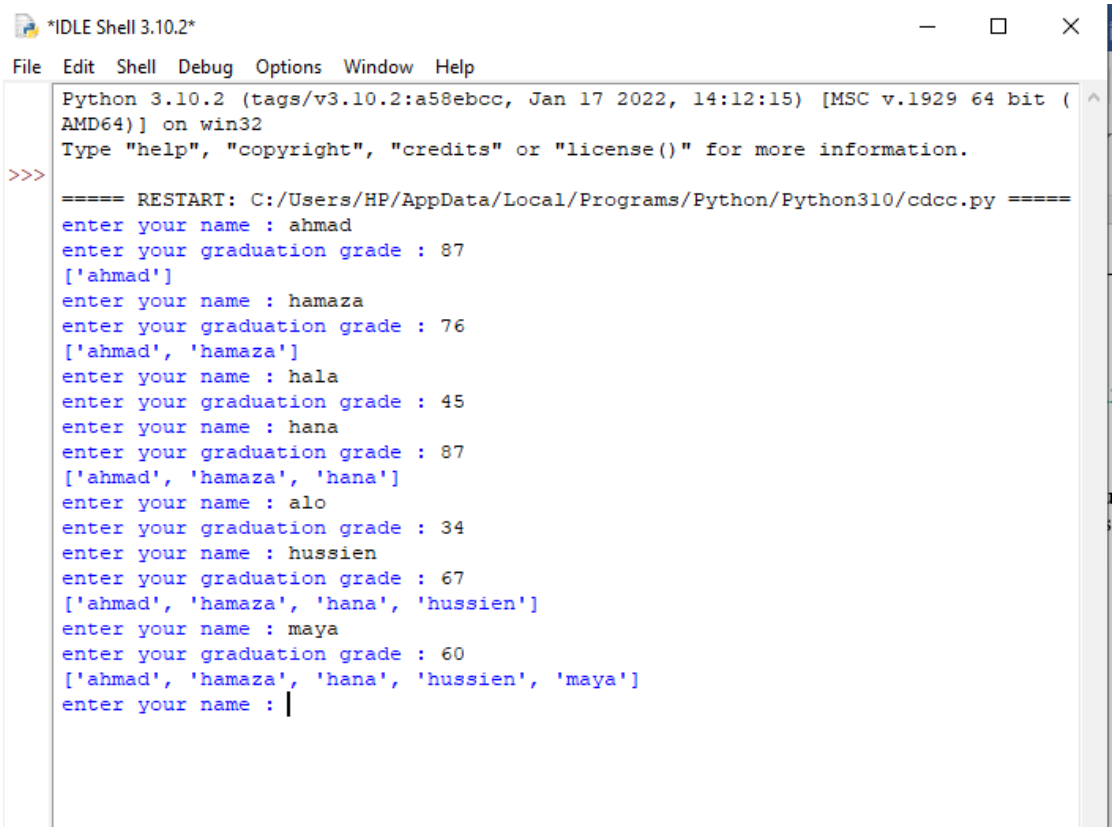
أحمد عماد غنام – 2254- الوظيفة الاولى

First Network Programming Homework

Question 1: Python Basics?

A-Define a list that contain the names of graduated students" 5 students at least":
Create a program that accept student name and prints if the user is graduated or not.

```
gl=[]

for i in range (0,10):

   name = input('enter your name : ')

   gg = int(input('enter your graduation grade : '))

   if gg >= 60:

      gl.append(name)

      print(gl)
```



B- Generate and print a list of odd numbers from 1 to 1000.
Tips: "List Comprehension"

```
lista=[]

for i in range (1,1000):
```

```
    if i%2 !=0 :
        lista.append(i)
print(lista)
```

```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

========== RESTART: C:/Users/HP/Desktop/123.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, 101, 103, 105, 107, 109, 111, 113, 115, 117,
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 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693,
 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725,
 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757,
 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789,
 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 813, 815, 817, 819, 821,
 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853,
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 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981,
 983, 985, 987, 989, 991, 993, 995, 997, 999]
```

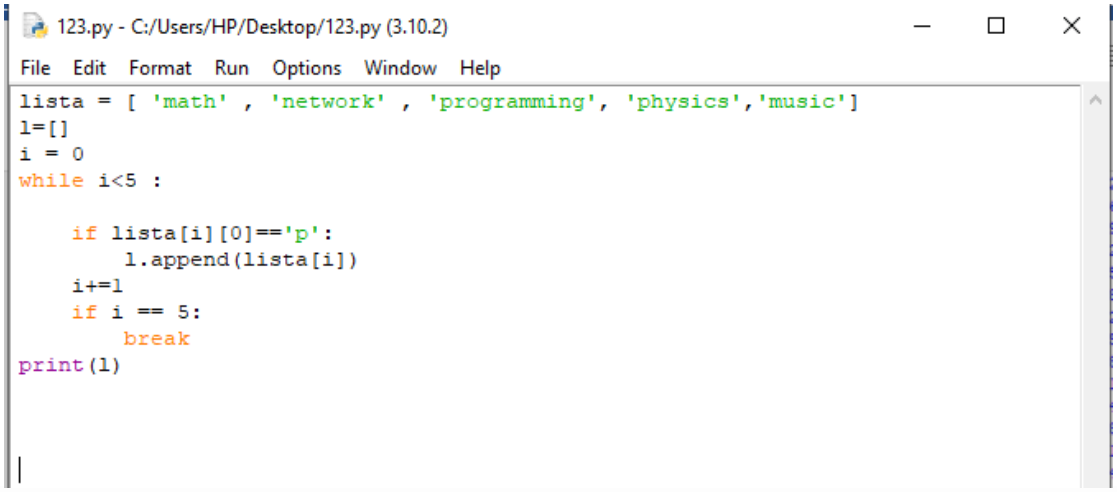
C- L=[‘Network’ , ’Math’ , ’Programming’, ‘Physics’ , ‘Music’]

In this exercise, you will implement a Python program that reads the items of the previous list and identifies the items that starts with ‘P’ letter, then print it on screen.

Tips: using loop, list ‘len ()’ method

```
lista = [ 'math' , 'network' , 'programming', 'physics','music']
l=[]
i = 0
while i<5 :
```

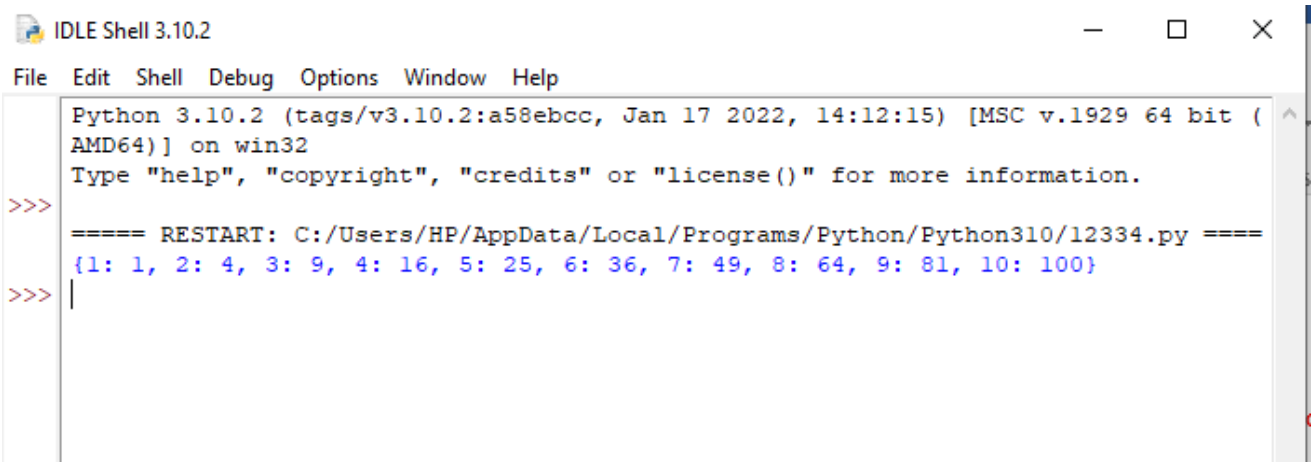
```
if lista[i][0]=='p':
l.append(lista[i])
i+=1
if i == 5:
break
print(l)
```



D: Using Dictionary comprehension, Generate this dictionary d={1:1,2:4,3:9,4:16,5:25,6:36,7:42,8:64,9:81,10:100}

```
lista={}
i=1
while i<11:
 a=i
 b=i*i
 lista.setdefault(a,b)
 i+=1
 if i==11:
  break
```

```
print(lista)
```



Question 2: Convert from decimal to binary

Write a Python program that converts a decimal number into its equivalent binary number.
The program should start reading the decimal number from the user. Then the binary equivalent number must be calculated. Finally, the program must display the equivalent binary number on the screen.
Tips: use empty list to hold binary number, use loop, use % operator, use // operator, use list append method, reverse the list.

```
num = int(input('enter the number'))

s = 0

a =[]

while(num!=0):

    s=num%2

    num=num//2

    a.append(s)

for i in range(0,1):

    a.reverse()

print(a,sep='&&')
```

```
===== RESTART: C:/Users/HP/AppData/Local/Programs/Python/Python310/12334.py ====
enter the number65
[1, 0, 0, 0, 0, 0, 1]
```

Question 3: Working with Files" Quiz Program"

Type python quiz program that takes a text or json or csv file as input for (20 (Questions, Answers)). It asks the questions and finally computes and prints user results and store user name and result in separate file.

import json

q1="""what is you university name :

a.tishreen

b.al baath """

q2= """ what is the country that you university is located in :

a.syria

b.lebanon"""

q3= """what is the legal age to be in university :

a.18

b.15 """

q4= """what is the highest degree in your country :

a.medicine

b engineering """

q5= """who established tishreen university :

a.prisedent hafez al asaad

b.prisedebt bashar al assad """

q6="""how many years is a engineering degree :

a.5

b.7 """

q7= """what is the letters that indicates to a doctor :

a.d

b.s """

q8= """what is the letters that indicates to an engineer :

a.d

b.e """

q9= """what is the best engineering degree :

a.telecommunication

b.architecture """

q10="""how many years does a doctor study at college :

a.6

b.10 """

q11="""does a phd holder is called doctor :

a.yes

b.no """

q12=""" is studying engineering too hard :

a.yes

b.no """

q13="""does an engineer has some kind of intelligence :

a.yes and alot

b.no not really

"""

q14="""does age effect your ability to learn :

a.yes

b.no """

q15="""how many times should someone fail to success :

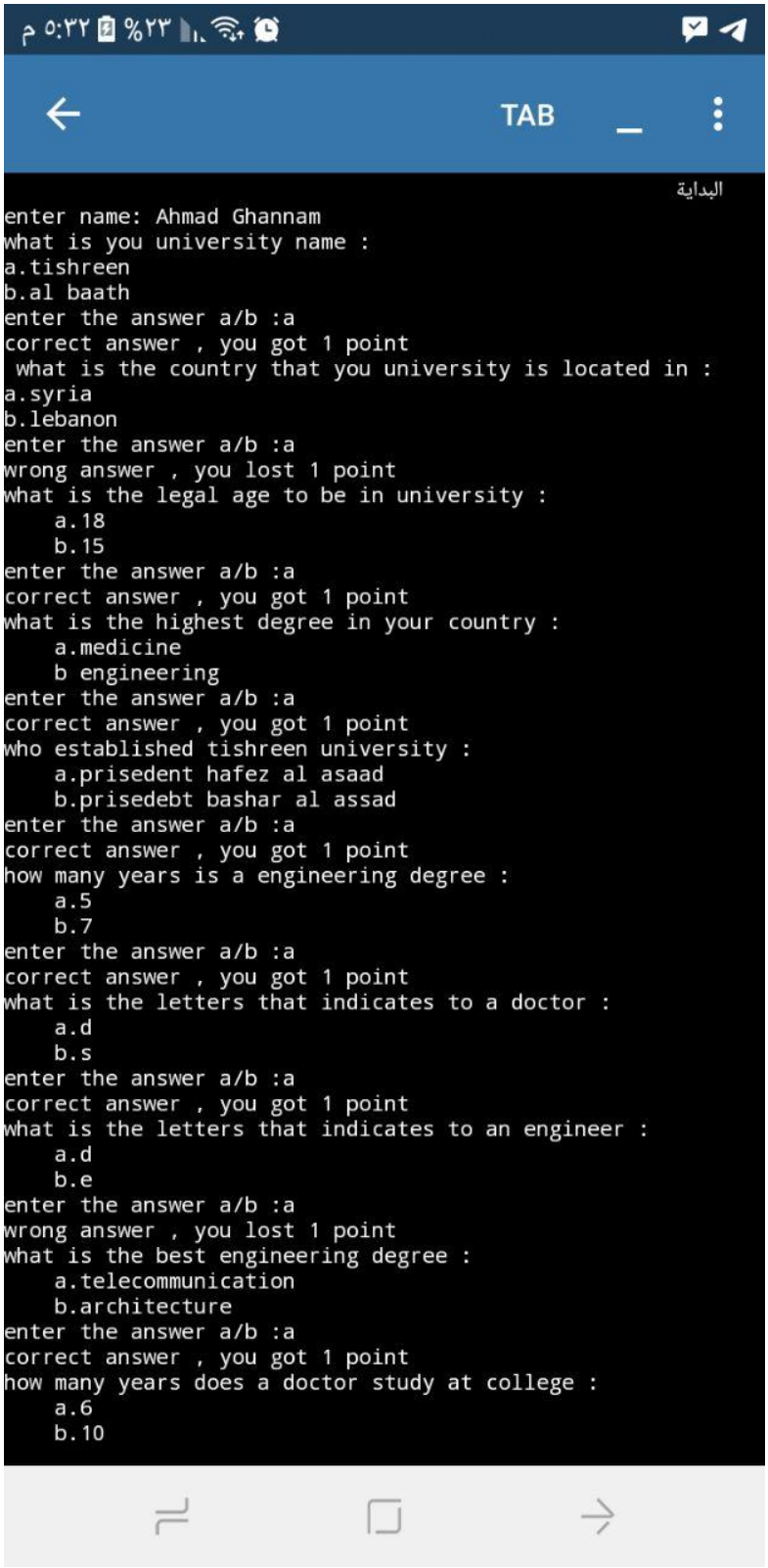
a.failing is not a measuring thing

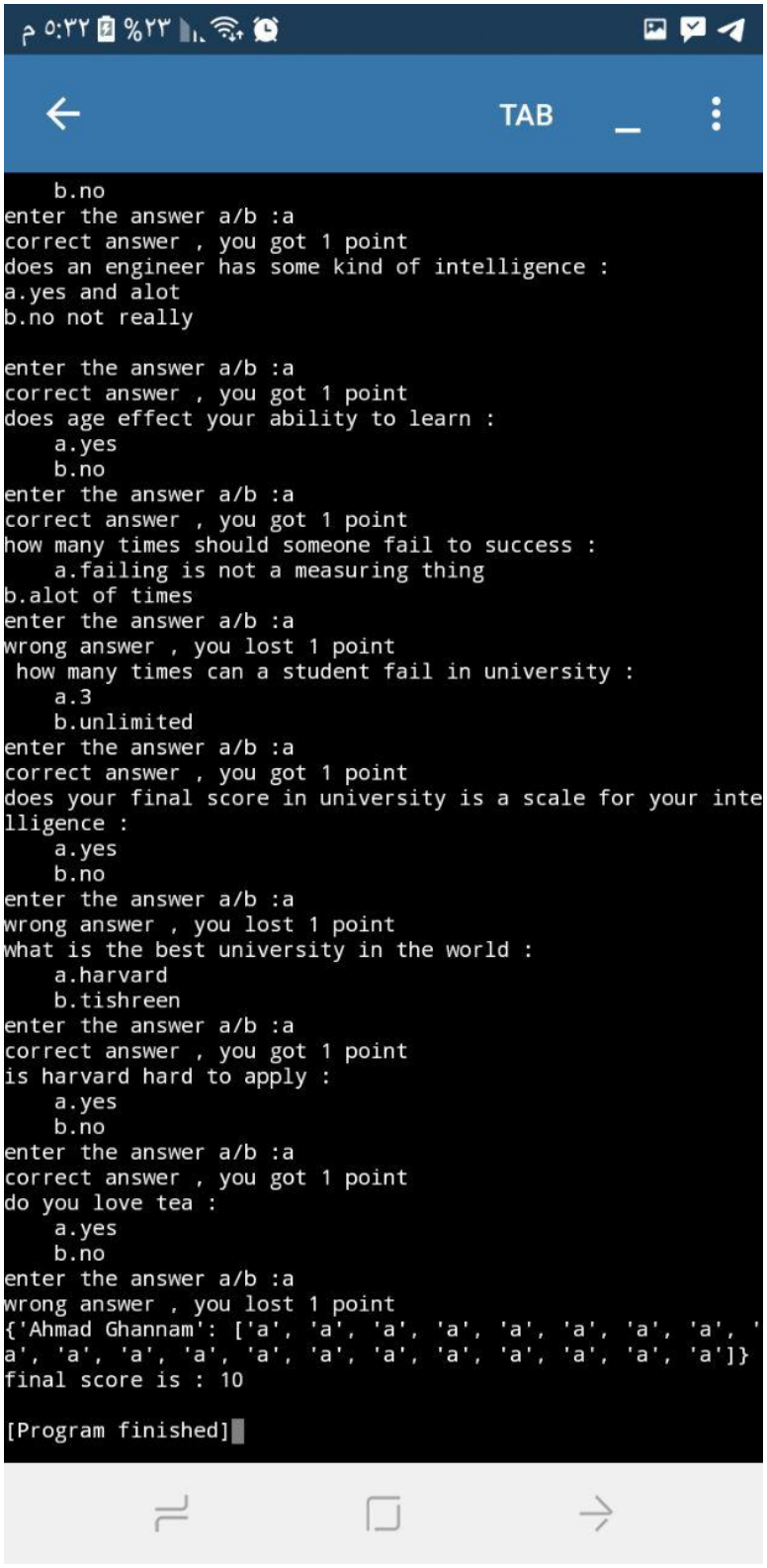
```
b.alot of times  """
q16=""" how many times can a student fail in university :
   a.3
   b.unlimited"""
q17="""does your final score in university is a scale for your intelligence :
   a.yes
   b.no """
q18="""what is the best university in the world :
   a.harvard
   b.tishreen """
q19="""is harvard hard to apply :
   a.yes
   b.no """
q20="""do you love tea :
   a.yes
   b.no"""
dic  =  { q1:"a" ,
q2:"b",q3:"a",q4:"a",q5:"a",q6:"a",q7:"a",q8:"b",q9:"a",q10:"a",q11:"a",q12:"a",q13:"a",q14:"a",q15:"b",q16:"a",q17
:"b",q18:"a",q19:"a",q20:"b"}
q=json.dumps(dic)
with open("q.json","w")as f:
  f.write(q)
```

json file :

```
import json
from pprint import pprint
print("البداية")
s=0
q1={}
L1=[]
```

```
A1=input("enter name: ")
with open("q.json","r") as f:
 q=json.loads(f.read())
 for i in q :
  print(i)
  ans=input("enter the answer a/b :")
  L1.append(ans)
  if ans==q[i]:
   print("correct answer , you got 1 point")
   s=s+1
  else:
   print("wrong answer , you lost 1 point")
   s=s-1
q1={A1:L1}
print(q1)
print("final score is :",s)
```


٥:٣٢ م %٢٣
TAB
البداية
enter name: Ahmad Ghannam
what is you university name :
a.tishreen
b.al baath
enter the answer a/b :a
correct answer , you got 1 point
what is the country that you university is located in :
a.syria
b.lebanon
enter the answer a/b :a
wrong answer , you lost 1 point
what is the legal age to be in university :
a.18
b.15
enter the answer a/b :a
correct answer , you got 1 point
what is the highest degree in your country :
a.medicine
b engineering
enter the answer a/b :a
correct answer , you got 1 point
who established tishreen university :
a.prisedent hafez al asaad
b.prisedebt bashar al assad
enter the answer a/b :a
correct answer , you got 1 point
how many years is a engineering degree :
a.5
b.7
enter the answer a/b :a
correct answer , you got 1 point
what is the letters that indicates to a doctor :
a.d
b.s
enter the answer a/b :a
correct answer , you got 1 point
what is the letters that indicates to an engineer :
a.d
b.e
enter the answer a/b :a
wrong answer , you lost 1 point
what is the best engineering degree :
a.telecommunication
b.architecture
enter the answer a/b :a
correct answer , you got 1 point
how many years does a doctor study at college :
a.6
b.10



Notes

- Homework is accepted as **well explained** Pdf & "Nicely Formatted Code" "You can do all job in one notebook then print as pdf or "copy and paste" on word document "use" then convert into pdf with extra info "

-You have to show:

Question number >>Question itself>> your answer code with explanations > your Result "you can use this doc as template"

-You Have to Show code execution as Screenshots from your laptop or phone''.

-Apply your full name and number, Homework number to pdf.

-Similar Solutions will rejected and not accepted.
- The Homework is accepted until the date of "12/5/2022", if after >> mark=mark- (current_date -12/5/2022)*0.3
- An Extra Marks if you upload your code to your GitHub Account, "PDF + Code"

```
target_words = set()

with codecs.open(path, 'r', encoding='utf-8') as f:
    lines = f.read().split('\n')

    for l,line in enumerate(lines[0:len(lines)-4]):
        print(l,'>>>',line)
        if line.isdigit():
            print(lines[l])
            mylist=[lines[l] ,lines[l+1],lines[l+2],lines[l+3],'\n']
            all_texts.append(mylist)
            print(mylist)
            print('**********')
try:
    os.mkdir('out',0o666)
except OSError as error:
    pass
```