أحمد عماد غنام – 2254- الوظيفة الاولى

https://github.com/AhmadGhannam98/some-simple-programs

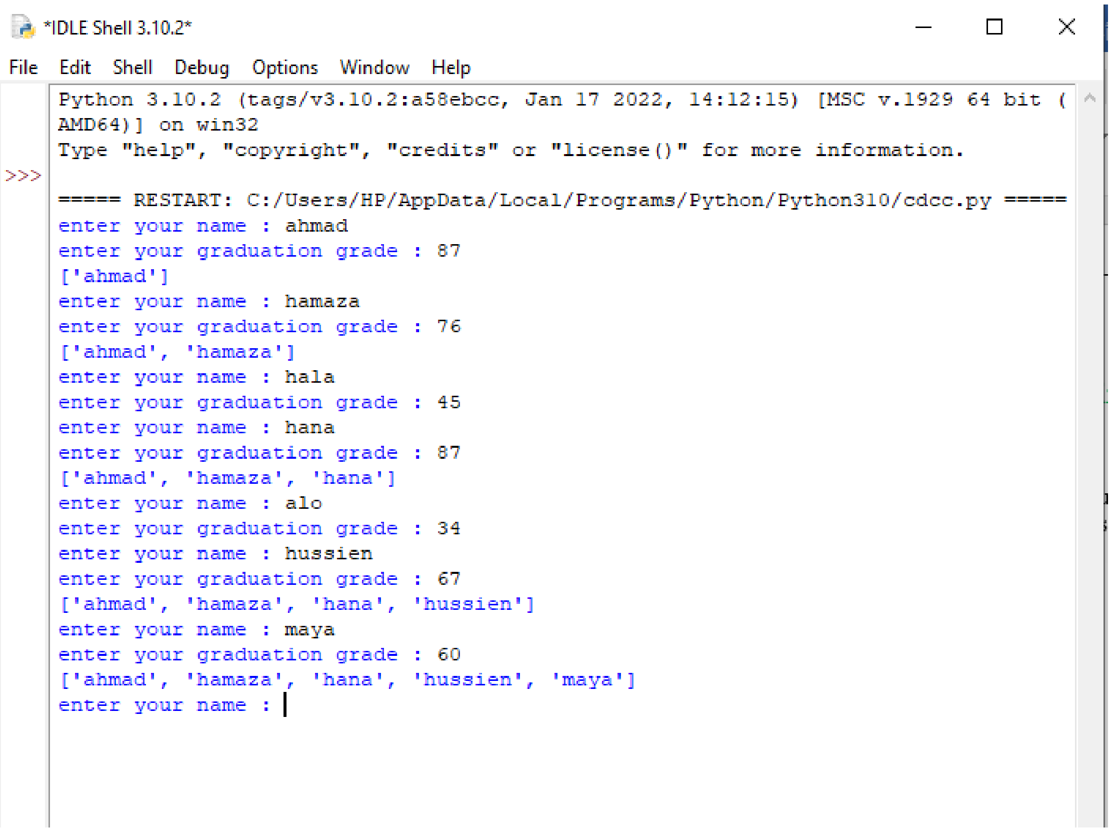
First Network Programming Homework

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)
```

تم تعريف قائمة فارغة وتمرير أسماء
طلاب مع درجاتهم ليقرر البرنامج في
حال كانوا ناجحين أم لا.. وتخزين
أسمائهم في القائمة



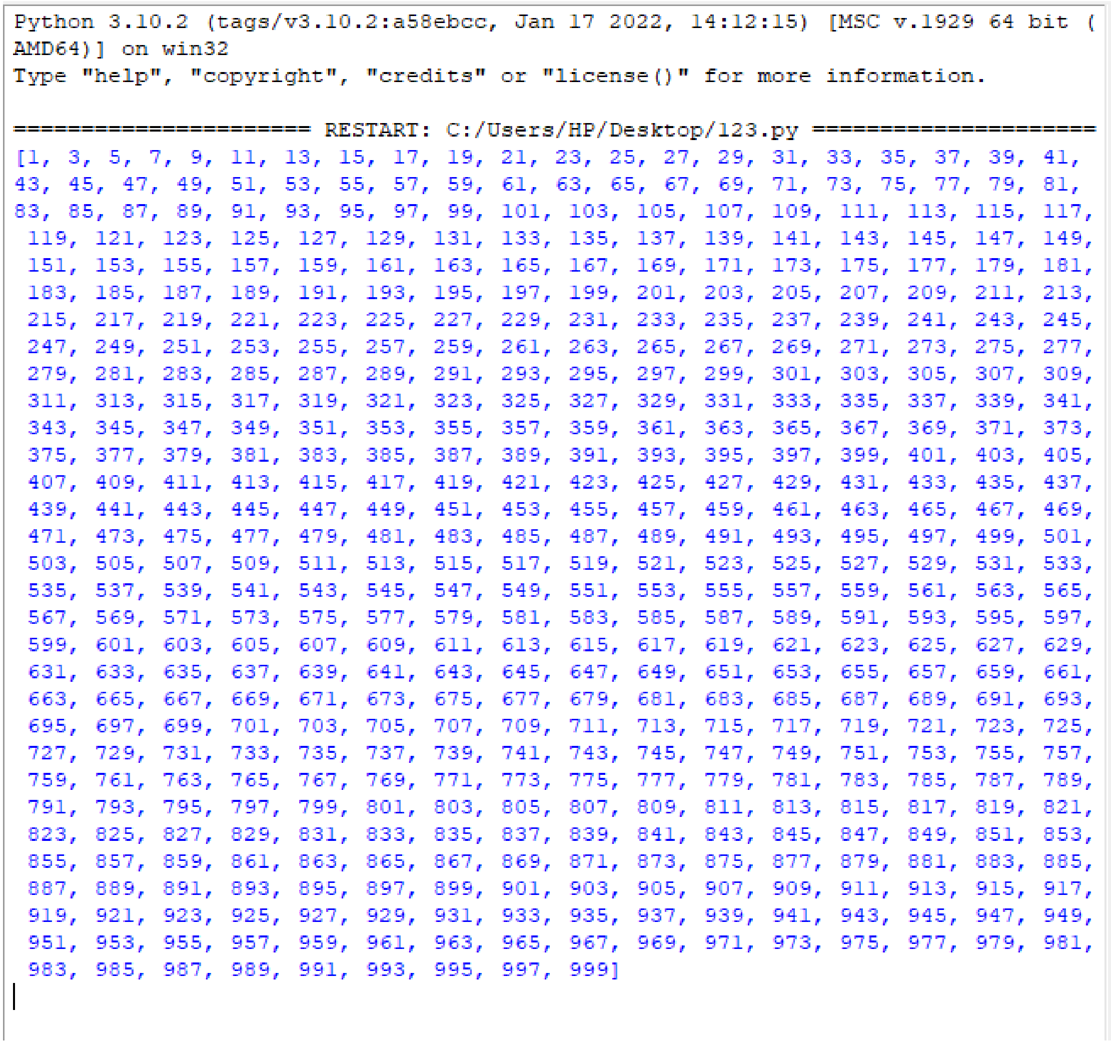
```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/HP/AppData/Local/Programs/Python/Python310/cdcc.py =====
enter your name : ahmad
enter your graduation grade : 87
['ahmad']
enter your name : hamaza
enter your graduation grade : 76
['ahmad', 'hamaza']
enter your name : hala
enter your graduation grade : 45
enter your name : hana
enter your graduation grade : 87
['ahmad', 'hamaza', 'hana']
enter your name : alo
enter your graduation grade : 34
enter your name : hussien
enter your graduation grade : 67
['ahmad', 'hamaza', 'hana', 'hussien']
enter your name : maya
enter your graduation grade : 60
['ahmad', 'hamaza', 'hana', 'hussien', 'maya']
enter your name : 
```

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)
```

تم انشاء حلقة for للاعداد من ١ حتى
١٠٠٠ وإختبار شرط التحقق الاعداد
الزوجية والعدد الذي لايحقق الشرط تتم
إضافته للقائمة على أنه عدد فردي



```
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,
 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149,
 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181,
 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213,
 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245,
 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277,
 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309,
 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341,
 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373,
 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405,
 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437,
 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469,
 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501,
 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533,
 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565,
 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597,
 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629,
 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661,
 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,
 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885,
 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917,
 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949,
 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’]

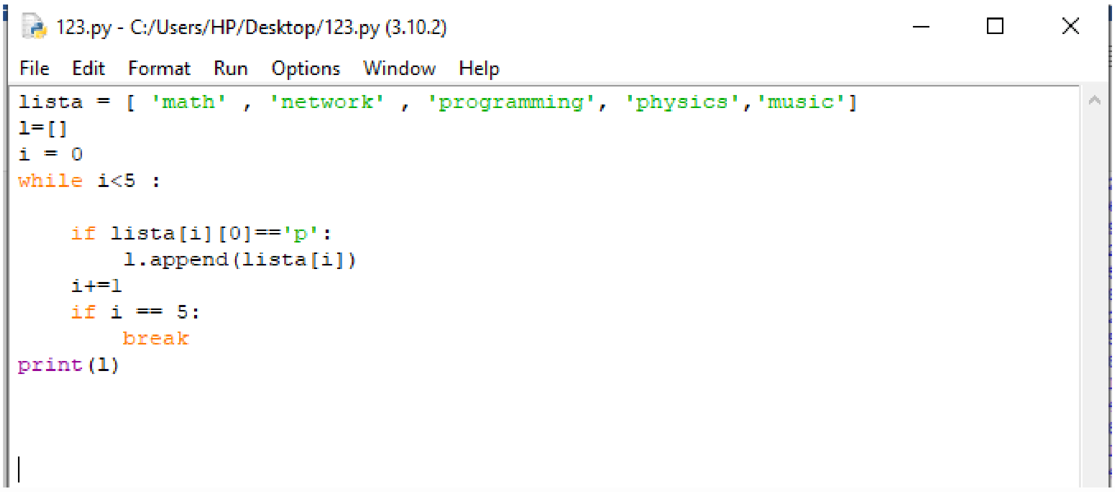
In this exercise, you will implement a Python program that reads the items of the previous list and identifies the items that starts with ‘P’ letter, then print it on screen.

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)
```

تم إنشاء كود وتمرير قائمة بأسماء مواد
ليتم البحث عن أول حرف من كل كلمة
والكلمة التي تبدأ بحرف p تمت اضافتها
للقائمة التي عرفناها ومن ثم طباعتها



```
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)
```

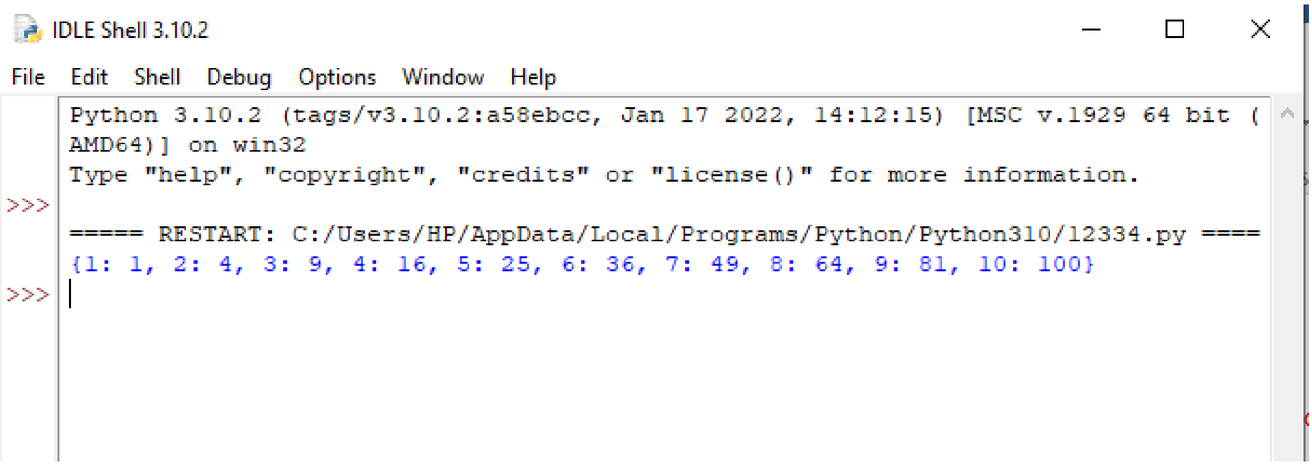
D: Using Dictionary comprehension, Generate this dictionary d={1:1,2:4,3:9,4:16,5:25,6:36,7:42,8:64,9:81,10:100}

```
lista={}

i=1

while i<11:

 a=i

 b=i*i

 lista.setdefault(a,b)

 i+=1

 if i==11:

  break
```

انشأنا قاموس فارغ وحلقة وفي كل مرة
نمرر لها key و value ليعيد لنا
الvalue مربعة

ومن ثم تخزينها في القاموس المعرف
مسبقا وطباعتها

```
print(lista)
```



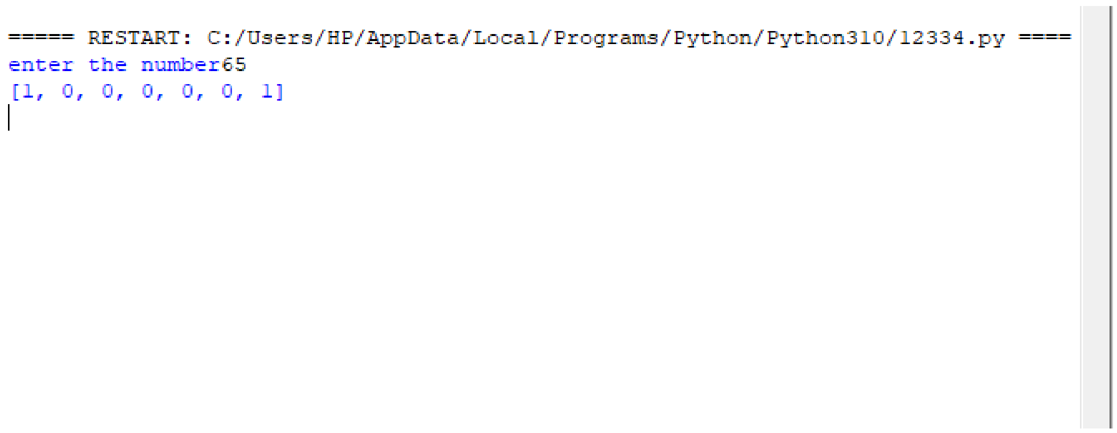
```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/HP/AppData/Local/Programs/Python/Python310/12334.py ====
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100}
>>> |
```

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='&&')
```

تم تعريف قائمة فارغة وإنشاء حلقة تقوم
بتحويل الرقم العشري الى ثنائي
بالاعتماد على هذه العمليتين الرياضيتين
ومن ثم تخزينها في القائمة الفارغة التي
عرفناها ومن ثم طباعتها بشكل معكوس



```
===== 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.

تم إنشاء ملف json يحتوي على الأسئلة
مع الخيارات لها..ثم تم تعريف
ديكشينري تحتوي على رقم السؤال
وجوابه ومن ثم تمريرها للملف ومن ثم
التعامل مع الملف من خلال ميثود
write

```
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
```

وفي التنفيذ تم استدعاء ملف ال json وتعريف عداد يعبر عن درجة الطالب وتعريف ديكشينري لتخزين فيها اجوبة الطالب مع العلامة التي حصل عليها في كل مرة

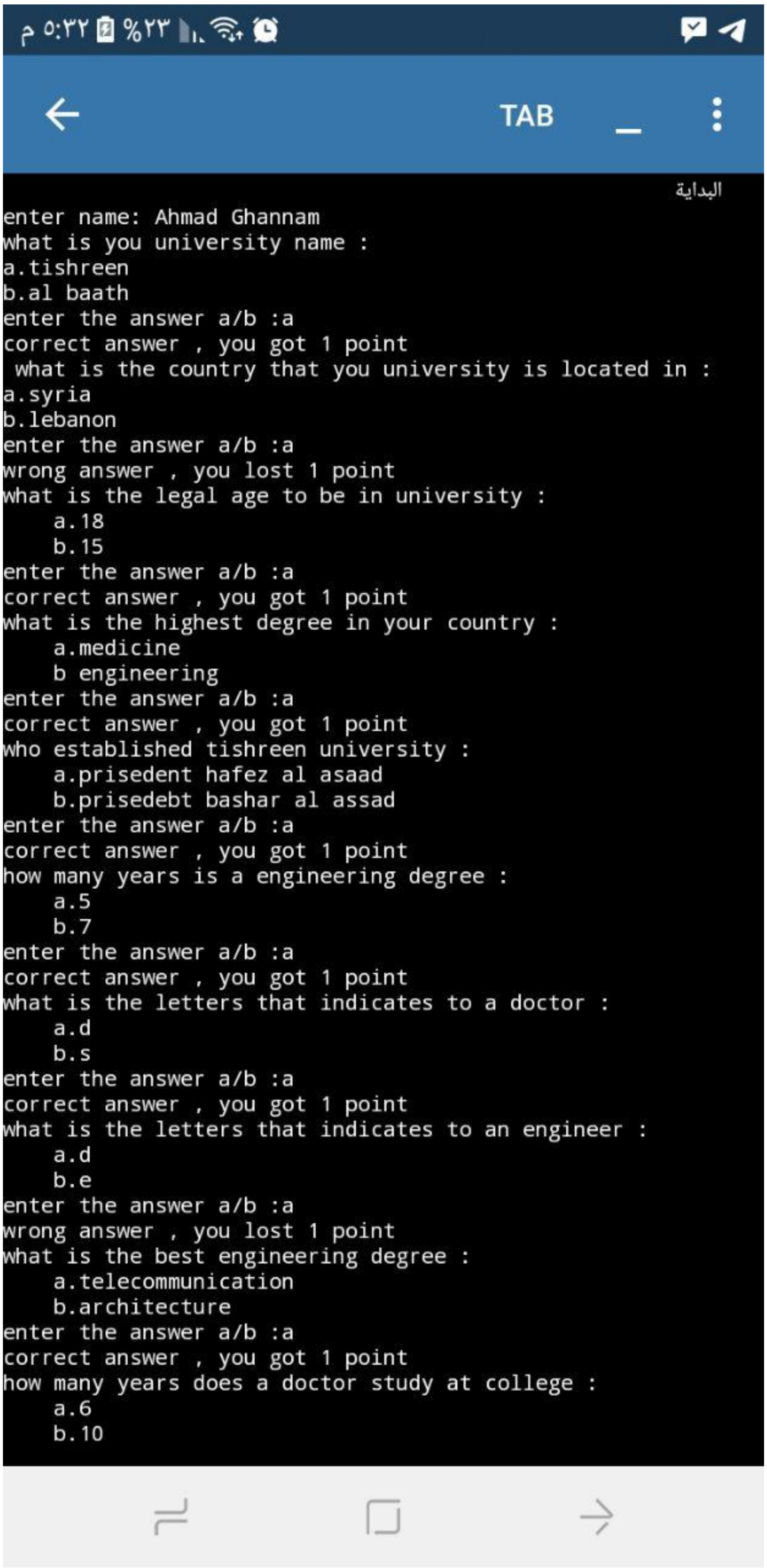
طباعة الاجوبة مع النتيجة النهائية للطالب

```
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)
```

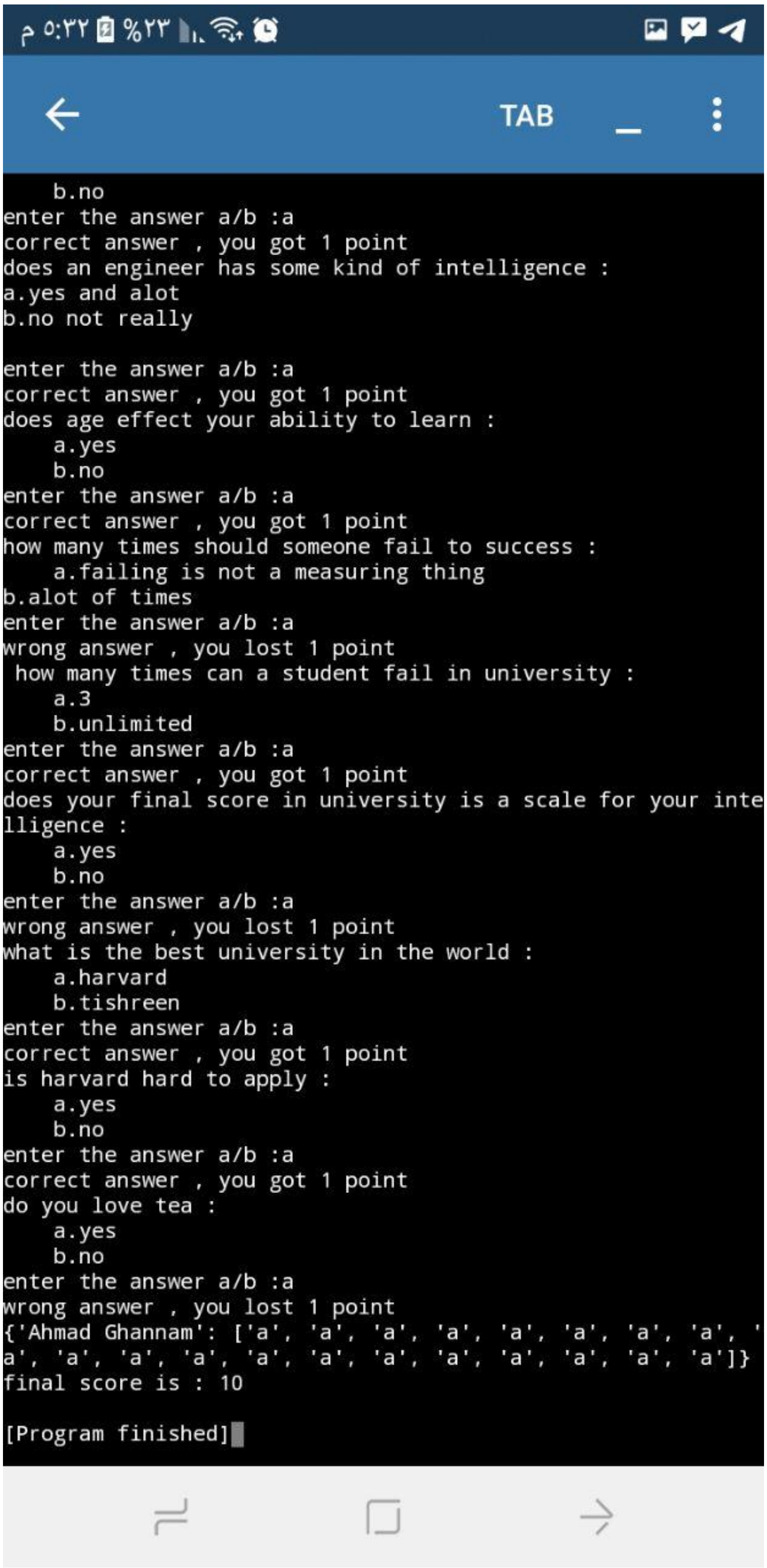
json file :

```
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)
```



```
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
```



```
    b.no
enter the answer a/b :a
correct answer , you got 1 point
does an engineer has some kind of intelligence :
a.yes and alot
b.no not really

enter the answer a/b :a
correct answer , you got 1 point
does age effect your ability to learn :
    a.yes
    b.no
enter the answer a/b :a
correct answer , you got 1 point
how many times should someone fail to success :
    a.failing is not a measuring thing
b.alot of times
enter the answer a/b :a
wrong answer , you lost 1 point
 how many times can a student fail in university :
    a.3
    b.unlimited
enter the answer a/b :a
correct answer , you got 1 point
does your final score in university is a scale for your inte
lligence :
    a.yes
    b.no
enter the answer a/b :a
wrong answer , you lost 1 point
what is the best university in the world :
    a.harvard
    b.tishreen
enter the answer a/b :a
correct answer , you got 1 point
is harvard hard to apply :
    a.yes
    b.no
enter the answer a/b :a
correct answer , you got 1 point
do you love tea :
    a.yes
    b.no
enter the answer a/b :a
wrong answer , you lost 1 point
{'Ahmad Ghannam': ['a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', '
a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a']}
final score is : 10

[Program finished]
```

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:

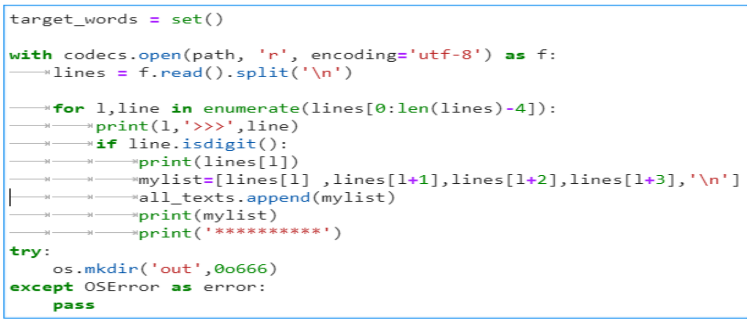
Question number >>Question itself>> your answer code with explanations > your Result "you can use this doc as template"

-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
```