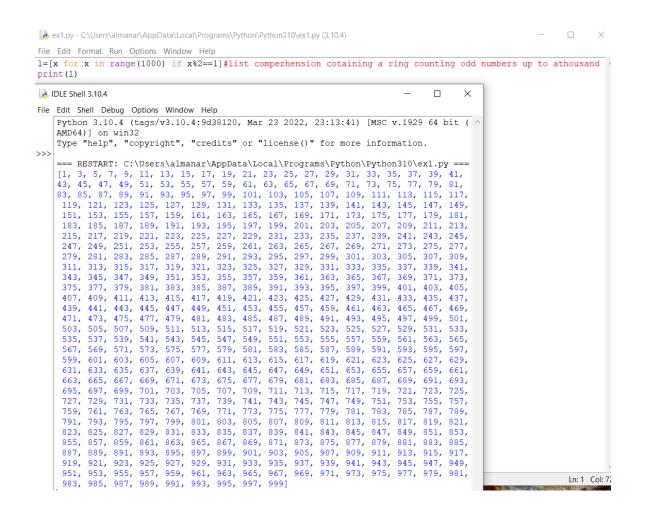
رهام معن حسن 2205 السؤال الأول : ِA

السؤال الأول: B



السؤال الأول: C

```
| Signature | Comparison | Comp
```

السؤال الأول: D

```
2.10.4) q4.py - C:\Users\almanar\AppData\Local\Programs\Python\Python310\q4.py
File Edit Format Run Options Window Help
dict=dict() #define an empty dictionary to add values to him
print("d={",end="")
for i in range(0,10):#A loop counting from 0 to 10
    i=i+1#increase counter
    dict[i]=i*i#squaring the number and adding it to the dictionary
    print(i,":",dict[i],end=" ,")#printing the number and its square as a dictionary
print("}")
Page 1018 IDLE Shell 3.10.4
                                                                                                                          File Edit Shell Debug Options Window Help
    Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32 Type "help", "copyright", "credits" or "license()" for more information.
    ==== RESTART: C:\Users\almanar\AppData\Local\Programs\Python\Python310\q4.py ===
    d=\{1:1,2:4,3:9,4:16,5:25,6:36,7:49,8:64\}
                                                                                                 ,9:81
                                                                                                                ,10 : 100
>>>
```

السؤال الثاني:

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IDLE Shell 3.10.4
                                                                                                                                                                                                П
3.10.4) g5.py - C:\Users\almanar\AppData\Local\Programs\Python\Python310\g5.py
                                                                                                            File Edit Shell Debug Options Window Help
File Edit Format Run Options Window Help
                                                                                                                Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (
number=int(input("Please enter a decimal number: ")) #allow the user to enter a decimal number
                                                                                                                AMD64)1 on win32
\verb|binary=[]#empty list to add values to|\\
                                                                                                                Type "help", "copyright", "credits" or "license()" for more information.
if number==0:
    print(number) #print the number 0 if the user enter it
                                                                                                                   == RESTART: C:\Users\almanar\AppData\Local\Programs\Python\Python310\q5.py ===
                                                                                                                Please enter a decimal number: 0
    while (number!=0): #aloop if the number entered is not zero
         remainder=number%2#remainder of divining the number by 2
                                                                                                            >>>
        binary.append(remainder) #add the remainder of division to the list
                                                                                                                 ==== RESTART: C:\Users\almanar\AppData\Local\Programs\Python\Python310\q5.py ===
number=number//2#divide the number by 2 with the result rounded to the minimum binary.reverse()#reverse the order of the list value until the highest ranked values apper first
                                                                                                                Please enter a decimal number: 200
                                                                                                                11001000
for i in range(0,len(binary)):#a ring that prints the list in the form of a number
    binary[i]=int (binary[i])
                                                                                                                  === RESTART: C:\Users\almanar\AppData\Local\Programs\Python\Python310\q5.py ===
    print(binary[i],end="")
                                                                                                                Please enter a decimal number: 1000
```

السؤال الثالث:

```
Figure 12 Comparison of Comparison and Asserts

Figure 12 Comparison of Comparis
```

```
def rule print():
    print("Welcome to 20 question quiz!")
    print("Rule 1 : Lifeline can be used only once")
    print("Rule 2 : You will only get one lifeline that is 50/50 which will eliminate two wrong answers")
    print("Rule 3 : The points are counted as follows : ")
    print("5 points are given for each correct answer")
    print ("Rule 5: After using a lifeline you get 10 seconds to give your answer")
    print("Okay, so let's get started")
#Defination of a function that displays the value of the final score
def point display(total):
    print("Your total points are ",total)
    if total <= 25:
        print("You can do better!")
    elif total <= 50:</pre>
        print("Good job! Keep improving")
    elif total <= 75:
        print("Nice! You seem smart")
    elif total <= 100:</pre>
        print("Great job! That was a nice ")
        print("You cracked the quiz! Brilliant!")
#Defining afunction that displays the questions and saves the answer chosen by the user in the file name.json
def ask ques():
    global name
    name=input("Enter your name: ") #Enter user name
    global qnum
    global total points
    global lifeline used
    data list=[] #Define an empty list to add user answwer to
    ques =random.sample (range(1, 21),20) #definition of a function that displays questions in random order
    #An episode displaying questions and options for answers
    for i in ques:
        print("Question{}".format(qnum))
        print(e read[0]["Question" + str(i)]['Ques'])
        print("a: " + e read[0]['Question' + str(i)]['a'])
        print("b: " + e read[0]['Question' + str(i)]['b'])
        print("c: " + e read[0]['Question' + str(i)]['c'])
        print("d: " + e_read[0]['Question' + str(i)]['d'])
        c3 =input("Answer : (press 1 for lifeline) ") #add user answer to empty list
        while c3.lower() not in ['a','b', 'c','d', 'l']:
            print("Choose correctly")
            c3 = input("Answer : (press 1 for lifeline) ")
        #if you press the letter (1), it goes to the help tool
        if c3.lower() == 'l':
            if not lifeline used:
                possible options = eliminate option(i)
```

```
possible options = eliminate option(i)
                lifeline used = True
                pass
            else:
                possible options = ['a', 'b', 'c','d']
               print("Sorry, lifeline already used!")
            while c3.lower() not in possible options:
                print("Choose correctly")
                c3 = input("Answer : ") #Enter the answer by the user
        if c3.lower() ==e read[0]['Question' + str(i)]['correct answer'].lower():
            print("Your answer is correct! Let's go to the next question!")
            data list.append(c3) #add user answer to empty list
            total points=total points+ 5
            #Enter the answer by the user
            d=("correct answer: ",data_list)
            with open("name.json", "w") as f:
                print(d)
        else:
            print("Sorry, wrong answer",e read[0]['Question' + str(i)]['correct answer'].lower())
            data list.append(c3)
            #open file name.json to write user results
            d=("wrong answer: ",data list)
            with open("name.json", "w") as f:
               print(d)
        #increase the number of questions
        qnum=qnum+1
#write the user name and its final degree in the file name.json
    with open("name.json", "w") as f:
        f.write("user name : "+name+"\n")
    with open("name.json", "a") as f:
       f.write("your score{} points\n".format(total_points))
    print(open("name.json","r").read())
    f.close()
    return "name.json"
#defination a function reading the previous chapter
def read all ques():
   global e read
   global reham
    #Downnload the question and answer file
    with open("ques.json") as fileobj:
        e read =json.load(fileobj)
if __name__ == '__main__':
    read_all_ques()#call_Definition of the rules
    print("Welcome to the 20 question quiz!")
    c2 = input("Do you need me to tell you the rules? (Enter Y/y)")
```

```
control o rounded for exercising a sortiff control amount from or ().
           print("Your answer is correct! Let's go to the next question!")
           data list.append(c3) #add user answer to empty list
           total points=total points+ 5
           #Enter the answer by the user
           d=("correct answer: ",data list)
           with open ("name.json", "w") as f:
                print(d)
       else:
           print("Sorry, wrong answer",e read[0]['Question' + str(i)]['correct answer'].lower())
           data list.append(c3)
           #open file name.json to write user results
           d=("wrong answer: ",data list)
           with open ("name.json", "w") as f:
               print(d)
        #increase the number of questions
       qnum=qnum+1
#write the user name and its final degree in the file name.json
   with open ("name.json", "w") as f:
       f.write("user name : "+name+"\n")
   with open ("name.json", "a") as f:
       f.write("your score{} points\n".format(total points))
   print(open("name.json", "r").read())
   f.close()
   return "name.json"
#defination a function reading the previous chapter
def read all ques():
   global e read
   global reham
   #Downnload the question and answer file
   with open("ques.json") as fileobj:
       e read =json.load(fileobj)
if name == ' main ':
   read all ques() #call Definition of the rules
   print("Welcome to the 20 question quiz!")
   c2 = input("Do you need me to tell you the rules? (Enter Y/y)")
   if c2.lower() == 'y':
       rule print()
   else: print("Okay, so let's get started")
   choice = input("Are you ready to start? (Enter Y/y)")
   if choice.lower() == 'y':
       ask ques() #call Definition of the question and the answer
       point display(total points)
       print("Thank you for playingthe quiz!")
       print("Okay! Do come back when you are ready! Bye :)")
```

```
IDLE Shell 3.10.4
```

```
ile Edit Shell Debug Options Window Help
   Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
   Type "help", "copyright", "credits" or "license()" for more information.
>>
   === RESTART: C:\Users\almanar\AppData\Local\Programs\Python\Python310\roro.py ==
   Welcome to the 20 question quiz!
   Do you need me to tell you the rules? (Enter Y/y)y
   Welcome to 20 question quiz!
   Rule 1: Lifeline can be used only once
   Rule 2 : You will only get one lifeline that is 50/50 which will eliminate two wrong answers
   Rule 3 : The points are counted as follows :
   5 points are given for each correct answer
   Rule 5 : After using a lifeline you get 10 seconds to give your answer
   Okay, so let's get started
   Are you ready to start? (Enter Y/y)y
   Enter your name: reham
   Question1
   Who created Python?
   a: Guido van Rossum
   b: Elon Musk
   c: Bill Gates
   d: Mark Zuckerburg
   Answer: (press 1 for lifeline) a
   Your answer is correct! Let's go to the next question!
   ('correct answer: ', ['a'])
   Ouestion2
   What is the result of mixing blue and red?:
   a: purple
   b: yellow
   c: green
   d: white
   Answer: (press 1 for lifeline) a
   Your answer is correct! Let's go to the next question!
   ('correct answer: ', ['a', 'a'])
   Question3
   How many colors are in the rainbow?
   a: 8
   b: 6
   c: 7
   d: 9
   Answer: (press 1 for lifeline) c
```

Your answer is correct! Let's go to the next question!

('correct answer: ', ['a', 'a', 'c'])

```
|Ouestion4
Which direction does the sun set in?
a: north
b: east
c: west
d: south
Answer: (press 1 for lifeline) b
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b'])
Question5
How many hours are in a day?
a: 28
b: 26
c: 29
d: 24
Answer: (press 1 for lifeline) d
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd'])
Ouestion6
Is the Earth round?
a: True
b: False
c: sometimes
d: What's Earth?
Answer: (press l for lifeline) a
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a'])
Question7
What is the result of the following arthmetic operation (6*5-2(3*2)+2)
a: 16
b: 170
c: 20
d: 0
Answer: (press 1 for lifeline) c
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c'])
Question8
Which bear lives at the North Pole
a: polar bear
b: brown bear
c: asiatic black bear
d: sloth bear
Answer: (press 1 for lifeline) a
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a'])
```

```
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a'])
Question9
What is the result of mixing blue and yellow?:
a: purple
b: red
c: green
d: white
Answer: (press 1 for lifeline) c
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c'])
Question10
How many days are in a year?
a: 365
b: 368
c: 367
d: 379
Answer: (press 1 for lifeline) a
Your answer is correct! Let's go to the next guestion!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a'])
Question11
Which is the smallest continent?
a: North America
b: Asia
c: Africa
d: Australia
Answer: (press l for lifeline) d
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd'])
Ouestion12
How many continents are in the world?
a: 8
b: 7
c: 6
d: 9
Answer: (press 1 for lifeline) b
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b'])
Ouestion13
Which is the fastest land animal?:
a: ostrich
b: tiger
c: cheetah
d: zebra
Answer: (press 1 for lifeline) c
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c'])
```

```
Question14
What year was Python created?
a: 1989
b: 1991
c: 2000
d: 2016
Answer : (press 1 for lifeline) a
Sorry, wrong answer b
('wrong answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a'])
Question15
Python is tributed to which comedy groub?:
a: Lonely Island
b: smosh
c: Monty Python
d: SNL
Answer: (press 1 for lifeline) c
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a', 'c'])
Question16
What is the capital of India?
a: Nagpur
b: Mumbai
c: Delhi
d: Bangalore
Answer: (press 1 for lifeline) c
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a', 'c', 'c'])
Question17
How many years are there in a millenium?
a: 1000
b: 100
c: 10000
d: 500
Answer: (press 1 for lifeline) a
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a', 'c', 'a'])
Question18
How many days are in a week?
a: 8
b: 6
c: 7
d: 9
Answer: (press 1 for lifeline) c
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a', 'c', 'a', 'c'])
```

```
Question19
How many letters are in the english alphabet?
a: 28
b: 26
c: 27
d: 29
Answer : (press 1 for lifeline) b
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a', 'c', 'a', 'c', 'b'])
Question20
Which is the largest animal?:
a: elephant
b: blue whale
c: hippopotamus
d: rhino
Answer : (press 1 for lifeline) b
Your answer is correct! Let's go to the next question!
('correct answer: ', ['a', 'a', 'c', 'b', 'd', 'a', 'c', 'a', 'c', 'a', 'd', 'b', 'c', 'a', 'c', 'a', 'c', 'b', 'b'])
user name : reham
your score95 points
Your total points are 95
Great job! That was a nice
Thank you for playingthe quiz!
```