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Homework -1-

#question1:

A:

```
l1=['HTTP','HTTPS','FTP','DNS']
l2=[80,443,21,53]
d=dict(zip(l1,l2))
print(d)
```

القائمة الأولى
القائمة الثانية
zip استخدمنا التابع للدمج بين معلومات القائمتين

```
e c:/Users/HP987/Desktop/225.py
{'HTTP': 80, 'HTTPS': 443, 'FTP': 21, 'DNS': 53}
```

B:

```
x=int(input()) #input number
n=1
for i in range (2,x+1):
   n=n*I
print(n)
```

ندخل عدد صحيح اكبر من صفر
عرفنا حيادي الضرب
ضربنا الحيادي بالعدد

ex:

```
x=6
n=1
for i in range (2,x+1):
   n=n*i
print(n)
```

output:

```
e c:/Users/HP987/Desktop/t=1.py
720
```

C:

```
l=['Network','Bio','Programming','Physics','Music']
x=[item for item in l if item.startswith('B')]
for item in x:
    print(item)
```

output:

```
Bio
```

D:

```
x={i:i+1 for i in range (11)} 11 عرفنا متحول يبدأ من صفر و ينتهي ب
print(x)
```

output:

```
{0: 1, 1: 2, 2: 3, 3: 4, 4: 5, 5: 6, 6: 7, 7: 8, 8: 9, 9: 10, 10: 11}
```

#question2:

```
p=int(input())
i=result=0
while p!=0:
 result=result+(p%10)*(2**i)
 p=p//10
 i+=1
print("n=",result)
```

output:

```
p=101
i=result=0
while p!=0:
 result=result+(p%10)*(2**i)
 p=p//10
 i+=1
print("n=",result)
```

```
n= 5
```

#question3:

```
import json

# Initialize variables
quiz = []
scores = 0
number = 1

# Load questions from file
with open("quiz.txt", 'r') as f:
    quiz = json.load(f)
```

```
print("Python Quiz Program")
print("Enter 't' for True or 'f' for False (if applicable)")
name = input("Enter your full name: ")

# Display and process questions
for item in quiz:
    ques = item["question"]
    correct_answer = item["answer"].strip().lower()

    print("Question", number, ":", ques)
    ans = input("The answer is: ").strip().lower()  # Convert answer to
lowercase for case-insensitive comparison

    if ans == correct_answer:  # Compare answers ignoring case
        scores += 1
        print("Correct")
    else:
        print("Wrong")
    number += 1

# Write result to file
result = {name: scores}
with open("results.txt", 'a') as m:  # Use 'a' to append to the file
    json.dump(result, m)
    m.write('\n')  # Add a new line for each result
```

output:

```
Python Quiz Program
Enter 't' for True or 'f' for False (if applicable)
Enter your full name: nehad mahmoud
Question 1 : What is the capital of Germany?
The answer is: berlin
Correct
Question 2 : What is the smollest planet in our solar system?
The answer is:
```

#question4:

```
class Bankaccount:
    def
__init__(self,account_number,account_holder,initial_balance=0.0):
        self.account_number=account_number
        self.balance=initial_balance
        self.account_holder=account_holder
    def deposit(self,amount):
```

```
            self.balance +=amount
            print("deposit=",+amount)
        def withdraw(self,amount):
            if self.balance>=amount:
                self.balance -=amount
            print("withdraw=",+amount)
        def get_balance(self):
            print("balance=",+self.balance)
    n = Bankaccount("11254","nehad")
    print("account number is:",n.account_number," ","Full Name
    is:",n.account_holder)
    n.deposit(100)
    n.withdraw(50)
    n.get_balance()
    class savingaccount(Bankaccount):
        def __init__(self,account_number,account_holder,
    balance=0,interset_rate=0):
            super().__init__(account_number,account_holder,balance)
            self.interest_rate=interset_rate
        def apply_interest(self):
            self.balance +=self.balance * (self.interest_rate / 100)
        def overrideprint(self):
            print("new balance:" ,self.balance ,"new interest rate:" ,
    self.interest_rate)
    v=savingaccount("123456","nehad",8,4)
    v.apply_interest()
    v.overrideprint()
```

output:

```
PS C:\Users\HP987\Desktop> & C:/Users/HP987/AppData/Local/Programs/Python/Python312/python.exe c:/Use
rs/HP987/nana.py
account number is: 11254   Full Name is: nehad
deposit= 100
withdraw= 50
balance= 50.0
new balance: 8.32 new interest rate: 4
PS C:\Users\HP987\Desktop>
```