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First Network Programming Homework

A-If you have two lists, L1=['HTTP','HTTPS','FTP','DNS'] L2=[80,443,20,53], convert it to generate this dictionary **d={**'HTTP':80,'HTTPS':443,'FTP':20,'DNS':53 **}**

Answer

<<<out{}=

<<<list1=['HTTP','HTTPS','FTP','DNS']

<<<list2[80,433,20,53]=

<<<for i,j in zip (list1,list2):

...out[i]=j

...

...

<<<print(out)

```
>>>out={}
>>>list1=['HTTP','HTTPS','FTP','DNS']
>>>list2=[80,433,20,53]
>>>for i,j in zip (list1,list2):
...     out[i]=j
...
...
>>>print(out)
{'HTTP': 80, 'HTTPS': 433, 'FTP': 20, 'DNS': 53}
>>>
```

B- Generate and print a list of primary numbers from 1 to 1000. Tips: “List Comprehension”

```
>>> for number in range(1,1000):
...     if number > 1:
...         for i in range (2,number):
...             if (number % i) == 0:
...                 break
...         else:
...             print (number)
...
...
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
```

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 ‘Ph’ letter, then print it on screen.

list1 = ['NETWORK','MATH','PROGRAMMING','PHYSICS','MUSIC']

i = 0

for i in range (len(list1)):

if list1[i].startswith("PH"):

print(list1[i])

```
list1 = ['NETWORK','MATH','PROGRAMMING','PHYSICS','MUSIC']
i = 0
for i in range (len(list1)):
    if list1[i].startswith("PH"):
        print(list1[i])
```

```
========== RESTART: C:\Users\techno\Documents\net prog\homwork 1\q3.py =====
PHYSICS
```

D: Using Dictionary comprehension, Generate this dictionary
d={1:2,2:3,3:4,4:5,5:6,6:7,7:8,8:9,9:10,10:11}

```
>>> diction = {d:d + 1 for d in range(1,11)}
>>> print(diction)
{1: 2, 2: 3, 3: 4, 4: 5, 5: 6, 6: 7, 7: 8, 8: 9, 9: 10, 10: 11}
>>>
```

Question 2: Convert from Binary to Decimal Write a Python program that converts a Binary number into its equivalent Decimal number. The program should start reading the binary number from the user. Then the decimal equivalent number must be calculated. Finally, the program must display the equivalent decimal number on the screen.

```
binnam = list(input("input a binary number:"))
val = 0
for  i in range(len(binnam)):
    digi = binnam.pop()
    if digi == '1' :
        val = val + pow(2,i)
print("the decimal value of the number is " , val )
```

```
input a binary number:110
the decimal value of the number is  6
```

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 csv or json file.

```
import json

file_path = "C:\question.json"

fo = open (file_path)

question = json.load(of)

f.close()

result = o

num = 1

print("enter t for true or f for false")

name = input("enter your name:")


for quest in questions.keys():

   print("question",num,":",quest)

   answer = input ("the answer is")

   if answer.upper()==question[quest].upper():

      result = result + 1

      print ("true answer")

   else:

      print ("fals answer")

   num = num + 1


endresult = {name:result}

s = open ("result.json",'w')

json.dump(endresult,m)
```

json file


```
{
"questions": [
{
"Where is continent of United State" : "North America",
"Where is continent of India" : "Asia",
"Where is continent of Germany" : "Europe",
"Where is continent of Japan" : "Asia",
"Where is continent of Ireland" : "Europe",
"Where is continent of France" : "Europe",
"Where is continent of China" : "Asia",
"Where is continent of Algeria" : "Africa",
"Where is continent of Italy" : "Europe",
"Where is continent of Syria" : "Asia",
"Where is continent of Brazil" : "South America",
"Where is continent of Qatar" : "Asia",
"Where is continent of Lebanon" : "Asia",
"Where is continent of Egypt" : "Africa",
"Where is continent of Peru" : "South America",
"Where is continent of Sweden" : "Europe",
"Where is continent of Russia" : "Asia",
"Where is continent of Kenya" : "Africa",
"Where is continent of United Arab Emirates" : "Asia",
}
]
}
```

```
import json
file_path = "C:\question.json"
fo = open (file_path)
question = json.load(of)
f.close()
result = o
num = 1
print("enter t for true or f for false")
name = input("enter your name:")

for quest in questions.keys():
    print("question",num,":",quest)
    answer = input ("the answer is")

    if answer.upper()==question[quest].upper():
         result = result + 1
         print ("true answer")
    else:
         print ("fals answer")
    num = num + 1


endresult = {name:result}
s = open ("result.json",'w')
json.dump(endresult,m)
```