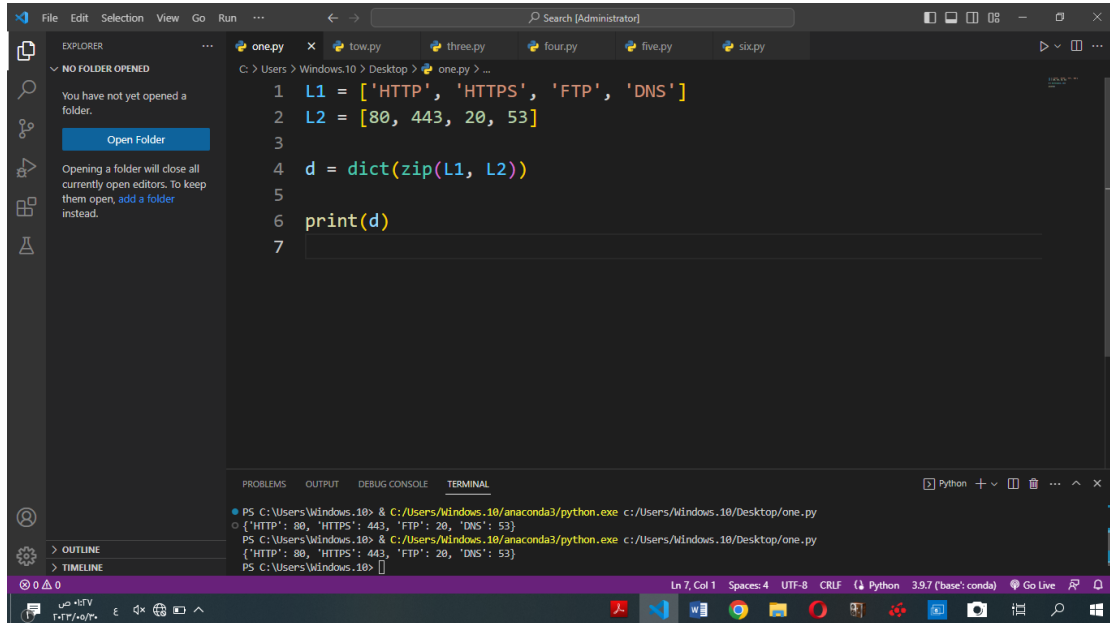


الاسم: خضر منير الرومي (٢٧٧٤)

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 }

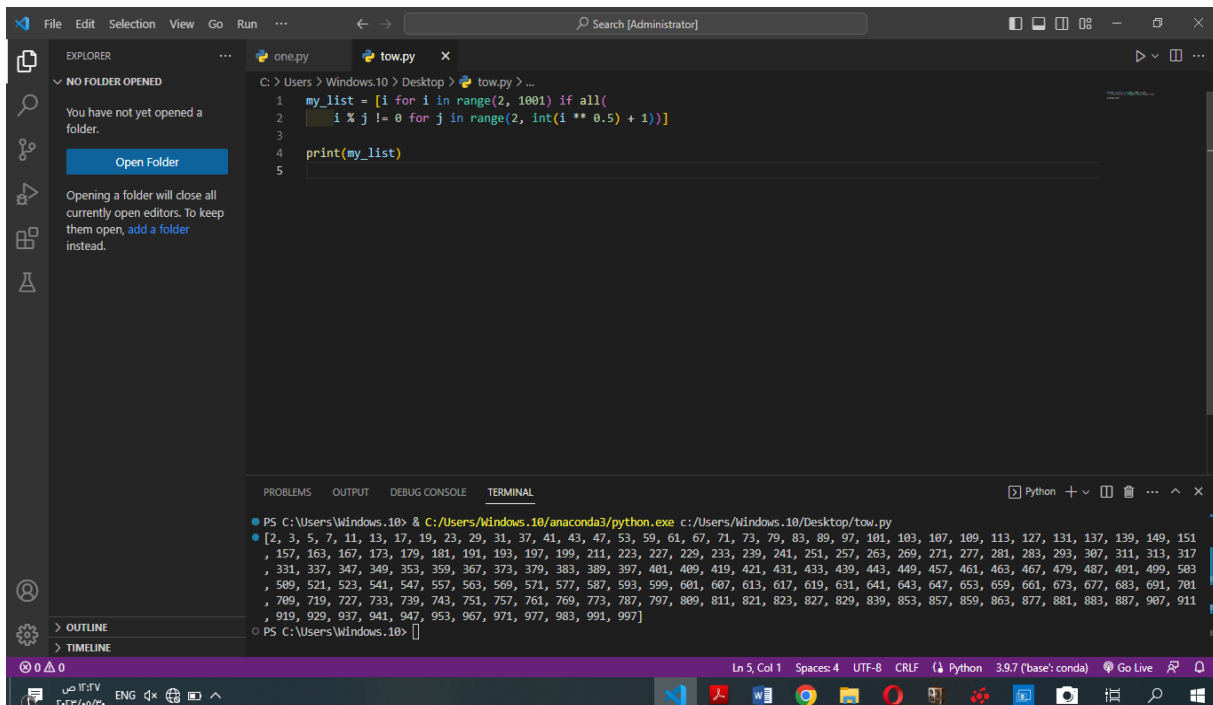


```
1 L1 = ['HTTP', 'HTTPS', 'FTP', 'DNS']
2 L2 = [80, 443, 20, 53]
3
4 d = dict(zip(L1, L2))
5
6 print(d)
7
```

Terminal output:

```
PS C:\Users\Windows.10> & C:/Users/Windows.10/anaconda3/python.exe c:/Users/Windows.10/Desktop/one.py
{'HTTP': 80, 'HTTPS': 443, 'FTP': 20, 'DNS': 53}
PS C:\Users\Windows.10> & C:/Users/Windows.10/anaconda3/python.exe c:/Users/Windows.10/Desktop/one.py
{'HTTP': 80, 'HTTPS': 443, 'FTP': 20, 'DNS': 53}
PS C:\Users\Windows.10>
```

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

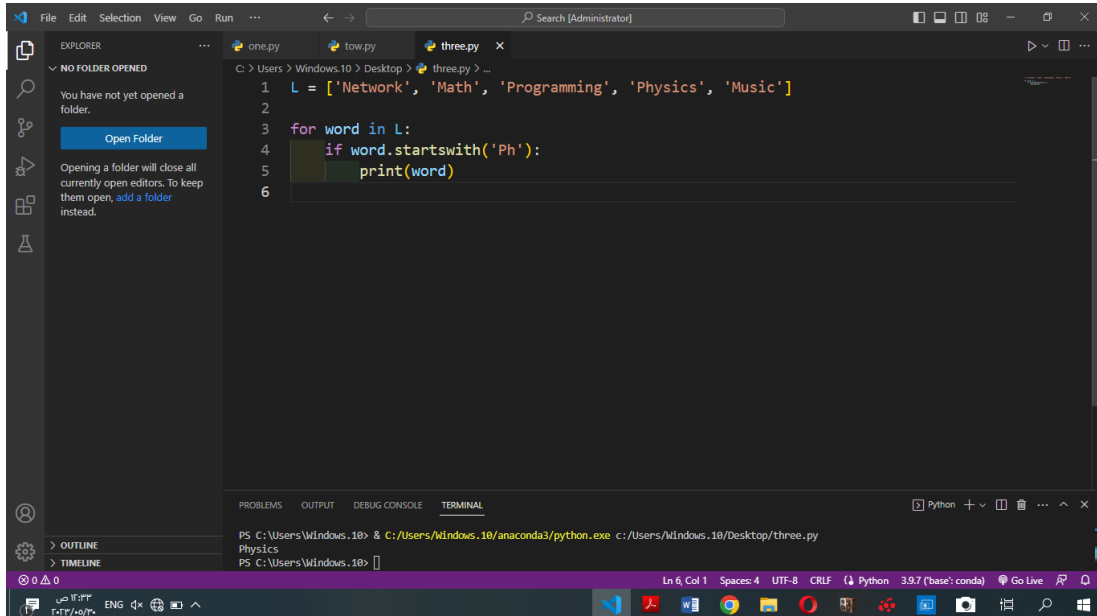


```
1 my_list = [i for i in range(2, 1001) if all(
2     i % j != 0 for j in range(2, int(i ** 0.5) + 1))]
3
4 print(my_list)
5
```

Terminal output:

```
PS C:\Users\Windows.10> & C:/Users/Windows.10/anaconda3/python.exe c:/Users/Windows.10/Desktop/tow.py
[2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263, 269, 271, 277, 281, 283, 293, 307, 311, 313, 317, 331, 337, 347, 349, 353, 359, 367, 373, 379, 383, 389, 397, 401, 409, 419, 421, 431, 433, 439, 443, 449, 457, 461, 463, 467, 479, 487, 491, 499, 503, 509, 521, 523, 541, 547, 557, 563, 569, 571, 577, 587, 593, 599, 601, 607, 613, 617, 619, 631, 641, 643, 647, 653, 659, 661, 673, 677, 683, 691, 701, 709, 719, 727, 733, 739, 743, 751, 757, 761, 769, 773, 787, 797, 809, 811, 821, 823, 827, 829, 839, 853, 857, 859, 863, 877, 881, 883, 887, 907, 911, 919, 929, 937, 941, 947, 953, 967, 971, 977, 983, 991, 997]
PS C:\Users\Windows.10>
```

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. **Tips:** using loop, 'len ()' , startswith() methods.



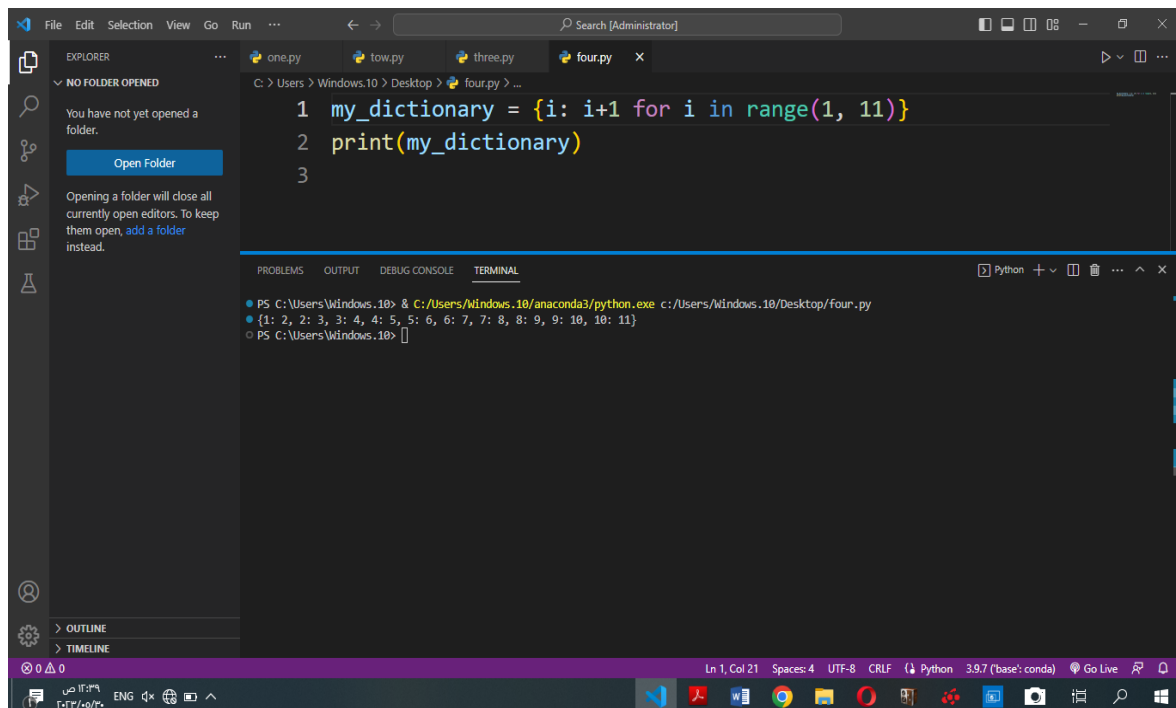
```
1 L = ['Network', 'Math', 'Programming', 'Physics', 'Music']
2
3 for word in L:
4     if word.startswith('Ph'):
5         print(word)
6
```

Terminal Output:

```
PS C:\Users\Windows.10> & C:\Users\Windows.10\anaconda3\python.exe c:/Users/Windows.10/Desktop/three.py
Physics
PS C:\Users\Windows.10>
```

.....

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}

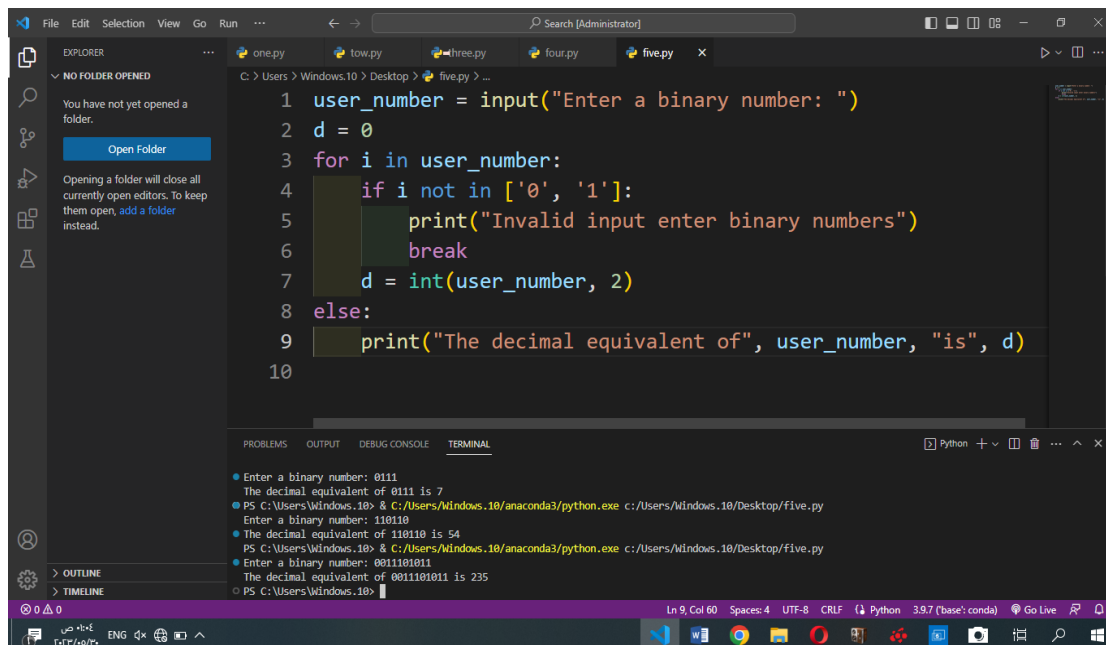


```
1 my_dictionary = {i: i+1 for i in range(1, 11)}
2 print(my_dictionary)
3
```

Terminal Output:

```
PS C:\Users\Windows.10> & C:\Users\Windows.10\anaconda3\python.exe c:/Users/Windows.10/Desktop/four.py
{1: 2, 2: 3, 3: 4, 4: 5, 5: 6, 6: 7, 7: 8, 8: 9, 9: 10, 10: 11}
PS C:\Users\Windows.10>
```

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. **Tips:** solve input errors.



```

1 user_number = input("Enter a binary number: ")
2 d = 0
3 for i in user_number:
4     if i not in ['0', '1']:
5         print("Invalid input enter binary numbers")
6         break
7     d = int(user_number, 2)
8 else:
9     print("The decimal equivalent of", user_number, "is", d)
10

```

Terminal Output:

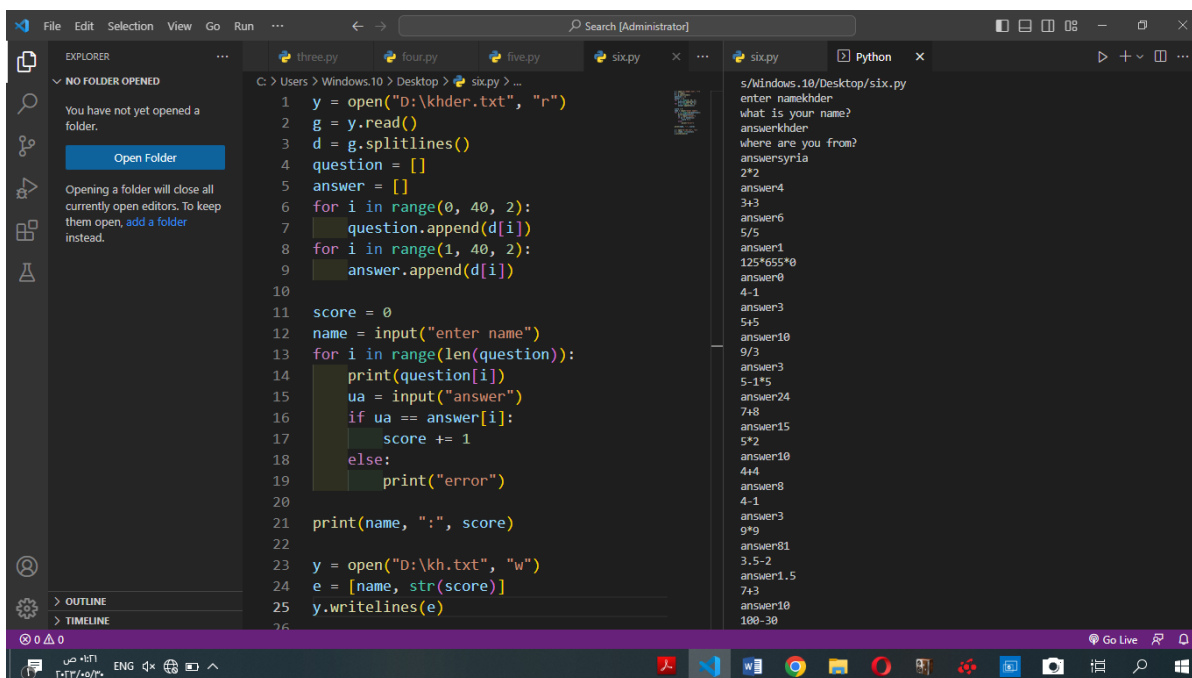
```

Enter a binary number: 0111
The decimal equivalent of 0111 is 7
PS C:\Users\Windows.10> & C:/Users/Windows.10/anaconda3/python.exe c:/Users/Windows.10/Desktop/five.py
Enter a binary number: 110110
The decimal equivalent of 110110 is 54
PS C:\Users\Windows.10> & C:/Users/Windows.10/anaconda3/python.exe c:/Users/Windows.10/Desktop/five.py
Enter a binary number: 0011101011
The decimal equivalent of 0011101011 is 235
PS C:\Users\Windows.10>

```

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.



```

1 y = open("D:\khder.txt", "r")
2 g = y.read()
3 d = g.splitlines()
4 question = []
5 answer = []
6 for i in range(0, 40, 2):
7     question.append(d[i])
8 for i in range(1, 40, 2):
9     answer.append(d[i])
10
11 score = 0
12 name = input("enter name")
13 for i in range(len(question)):
14     print(question[i])
15     ua = input("answer")
16     if ua == answer[i]:
17         score += 1
18     else:
19         print("error")
20
21 print(name, ":", score)
22
23 y = open("D:\kh.txt", "w")
24 e = [name, str(score)]
25 y.writelines(e)
26

```

Terminal Output:

```

s/windows.10/Desktop/six.py
enter namekhder
what is your name?
answerkhder
where are you from?
answerysria
2*2
answer4
3+3
answer6
5/5
answer1
125*655*0
answer0
4-1
answer3
5+5
answer10
9/3
answer3
5-1*5
answer24
7+8
answer15
5*2
answer10
4+4
answer8
4-1
answer3
9*9
answer81
3/5-2
answer1.5
7+3
answer10
100-30

```

