

Syrian Arab Republic



اللاذقية - جامعة تشرين

Lattakia - Tishreen Universit

Department of Communication and electrical engineering

5th , Network Programming : Homework No1

الجمهورية العربية السورية

كلية الهندسة الكهربائية والميكانيكية

قسم هندسة الاتصالات والالكترونيات

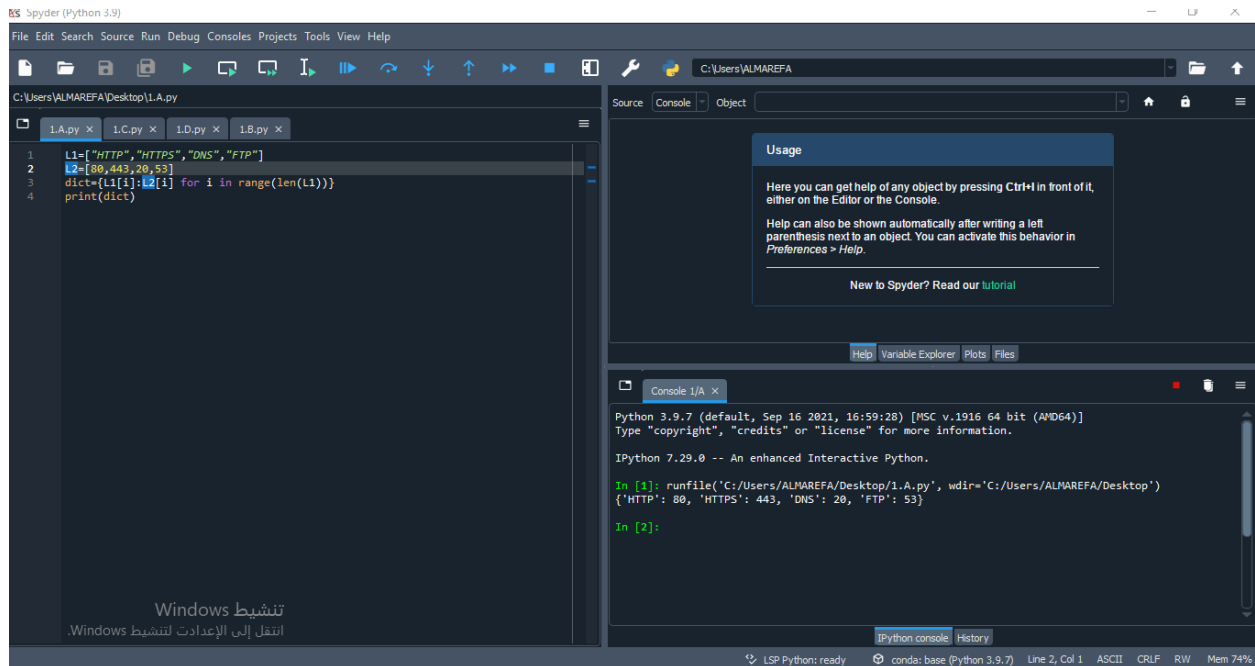
برمجة شبكات 1 السنة الخامسة: وظيفة

Name : **Amani Mohammad**, Number: **2772**, Submitted To GitHub: **Amani33**

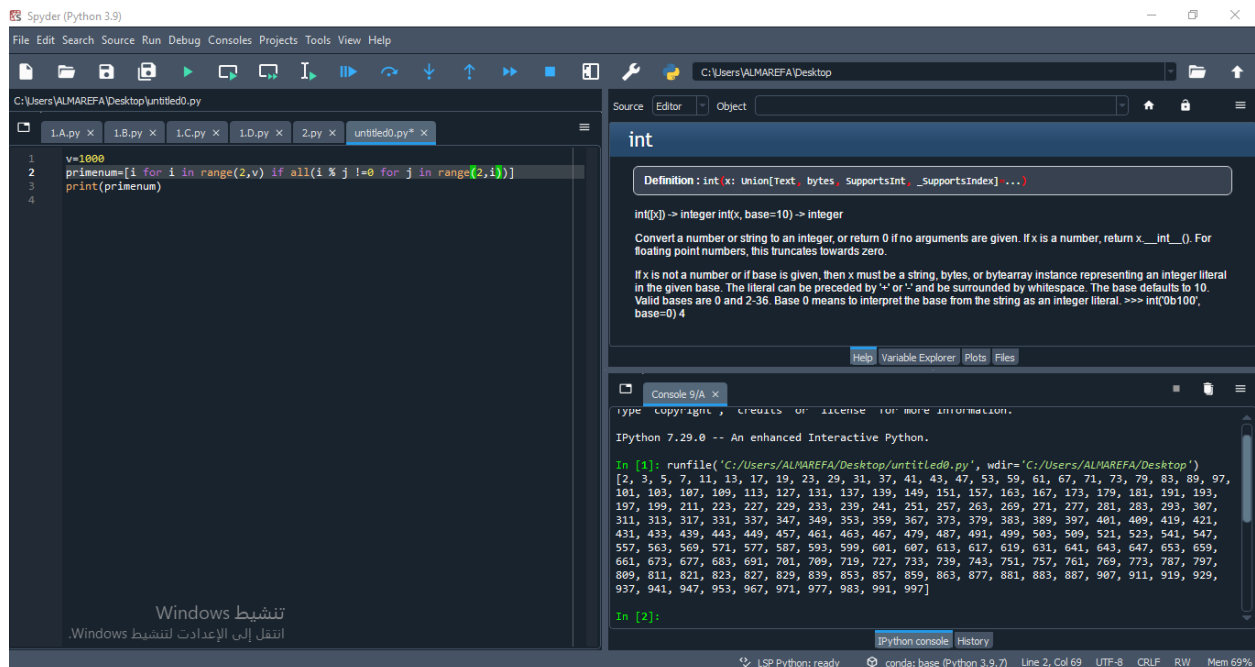
First Network Programming Homework

Question 1: **Python Basics?**

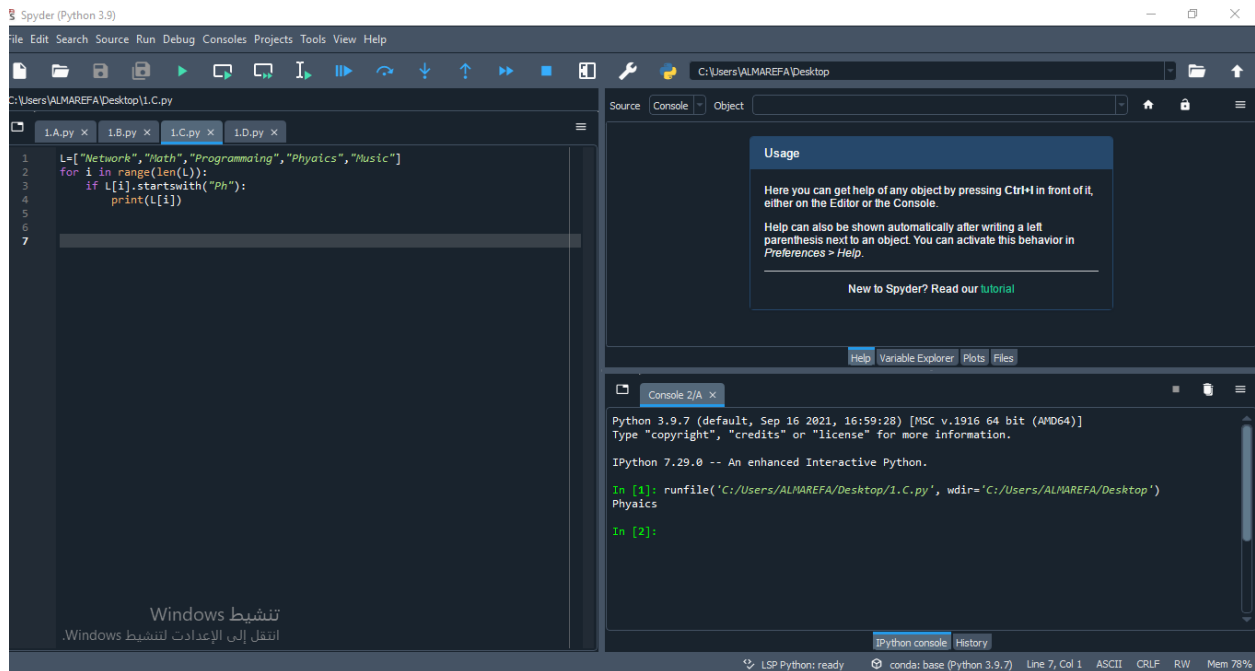
A-If you have two lists, L1=['HTTP','HTTPS','FTP','DNS'] L2=[80,443,20,53],
convert it to generate this
dictionary={'HTTP':80,'HTTPS':443,'FTP':20,'DNS':53 }



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



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



The screenshot shows the Spyder Python IDE interface. The main editor window displays a Python script with the following code:

```
1 L=['Network','Math','Programming','Physics','Music']
2 for i in range(len(L)):
3     if L[i].startswith("Ph"):
4         print(L[i])
5
6
7
```

The console window at the bottom right shows the output of the script:

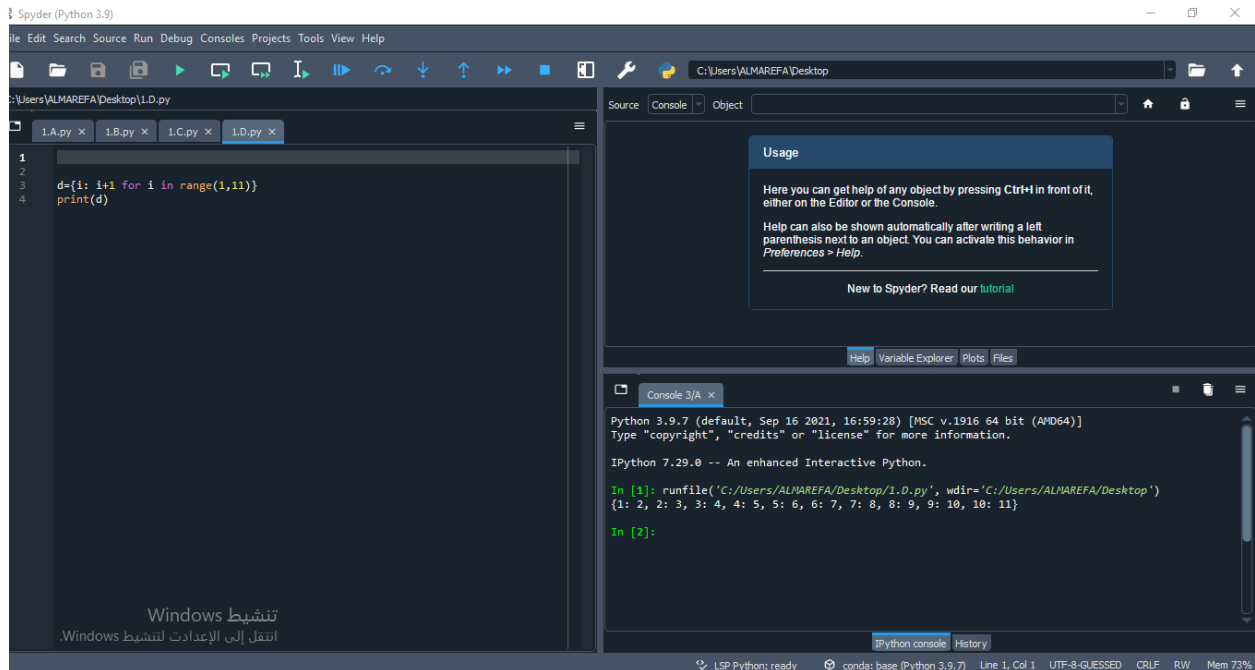
```
Python 3.9.7 (default, Sep 16 2021, 16:59:28) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 7.29.0 -- An enhanced Interactive Python.

In [1]: runfile('C:/Users/ALMAREFA/Desktop/1.C.py', wdir='C:/Users/ALMAREFA/Desktop')
Physics
In [2]:
```

The status bar at the bottom indicates the environment is 'LSP Python: ready' and the memory usage is 'Mem 78%'.

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}



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 Binarynum=input("enter Binary number: ")
2 for num in Binarynum:
3     if num not in ["0","1"]:
4         print("Your num is not binary")
5         exit()
6 decimalnum=0
7 i=len(Binarynum) - 1
8 for num in Binarynum :
9     decimalnum +=int(num)*2**i
10    i-=1
11 print("decimal number is: ",decimalnum)
12
```

int

Definition: int(x: Union[Text, bytes, SupportsInt, _SupportsIndex] ...) -> integer

int(x) -> integer int(x, base=10) -> integer

Convert a number or string to an integer, or return 0 if no arguments are given. If x is a number, return x.__int__(). For floating point numbers, this truncates towards zero.

If x is not a number or if base is given, then x must be a string, bytes, or bytearray instance representing an integer literal in the given base. The literal can be preceded by '+' or '-' and be surrounded by whitespace. The base defaults to 10. Valid bases are 0 and 2-36. Base 0 means to interpret the base from the string as an integer literal. >>> int('0b100', base=0) 4

Console 12/A

```
In [1]: runfile('C:/Users/ALMAREFA/Desktop/2.py', wdir='C:/Users/ALMAREFA/Desktop')
enter Binary number: 3
Your num is not binary
Traceback (most recent call last):
  File "C:/Users/ALMAREFA/Desktop/2.py", line 5, in <module>
    exit()
NameError: name 'exit' is not defined

In [2]: runfile('C:/Users/ALMAREFA/Desktop/2.py', wdir='C:/Users/ALMAREFA/Desktop')
enter Binary number: 101
decimal number is: 5
```

```
1 Binarynum=input("enter Binary number: ")
2 for num in Binarynum:
3     if num not in ["0","1"]:
4         print("Your num is not binary")
5         exit()
6 decimalnum=0
7 i=len(Binarynum) - 1
8 for num in Binarynum :
9     decimalnum +=int(num)*2**i
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11 print("decimal number is: ",decimalnum)
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enter Binary number: 101
decimal number is: 5
```

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

