

**Question 1 :** we run Server Code for once, and run & stop Client Code 5 times.

Server code :

```
*server.py - C:\Users\Basel\ICT\Desktop\Assignment2-Network Programming\server.py (3.9.2)*
File Edit Format Run Options Window Help
1 #Question one | multi threaded TCP Server/Client
2 #Server Side Code
3 import threading, socket
4 s_t = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
5 Port_num = 97
6 IP_Loop = '127.0.0.1'
7 s_t.bind((IP_Loop, Port_num)) #assign an IP address and port number to Server
8 s_t.listen(97) #server is listening to connections on port 97 | client accepted by server must connect to this port too.
9 print("server is ready to receive request from client")
10 print("server Wait a client connection ")
11 s_g = {'Basel':91, 'Majed':74, 'Yara':86, 'Hala':78, 'Ahmed':65} #creating dictionary includes students information
12 c_n = 0 #set initial value to c_n variable | c_n is number of clients that connect to this server
13 c_i = [] #put each client that connects to the server in a list called c_i | c_i contains all clients connected to the server.
14 def req_func (client_socket,clients,numofclient):
15     #test if the 5th client has connected
16     if c_n == 5:
17         gi_win = "congrats ,you win (IP,Portnumber) of Previously accepted clients" + str(c_i)
18         client_socket.send(gi_win.encode())
19     else:
20         client_socket.send(" ".encode())
21     while True:
22         try:
23             s_n = client_socket.recv(2048).decode() #assign student name that sent by client to s_n variable
24             if s_n == 'exit':
25                 break
26             else:
27                 print("Student is: ", s_n)
28                 s_r = s_g[s_n] #assign score of student that sent by client to s_r variable
29                 print("result is: ", s_r)
30                 client_socket.send(str(s_r).encode()) #send encoded information to client
31             except socket.error as rrr:
32                 print(rrr)
33                 # test if student information that sent by client not exist in s_g dictionary
34             except KeyError as err:
35                 print("Student information received are not exist in our dictionary")
36                 client_socket.send("Student info are not exist in server dictionary".encode())
37         client_socket.close()
38     while True:
39         client_socket, client_add = s_t.accept()
40         c_i.append(client_add)
41         c_n += 1
42         thread = threading.Thread(target=req_func, args=(client_socket,c_i,c_n))
43         thread.start()
44
```

## Client Code :

```
client.py - C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\client.py (3.9.2)
File Edit Format Run Options Window Help

#Question one | multi threaded TCP Server/Client
#Client Side Code
import socket
client = socket.socket(socket.AF_INET, socket.SOCK_STREAM)

IP_Loop = '127.0.0.1'
Port_num = 97
client.connect((IP_Loop ,Port_num))

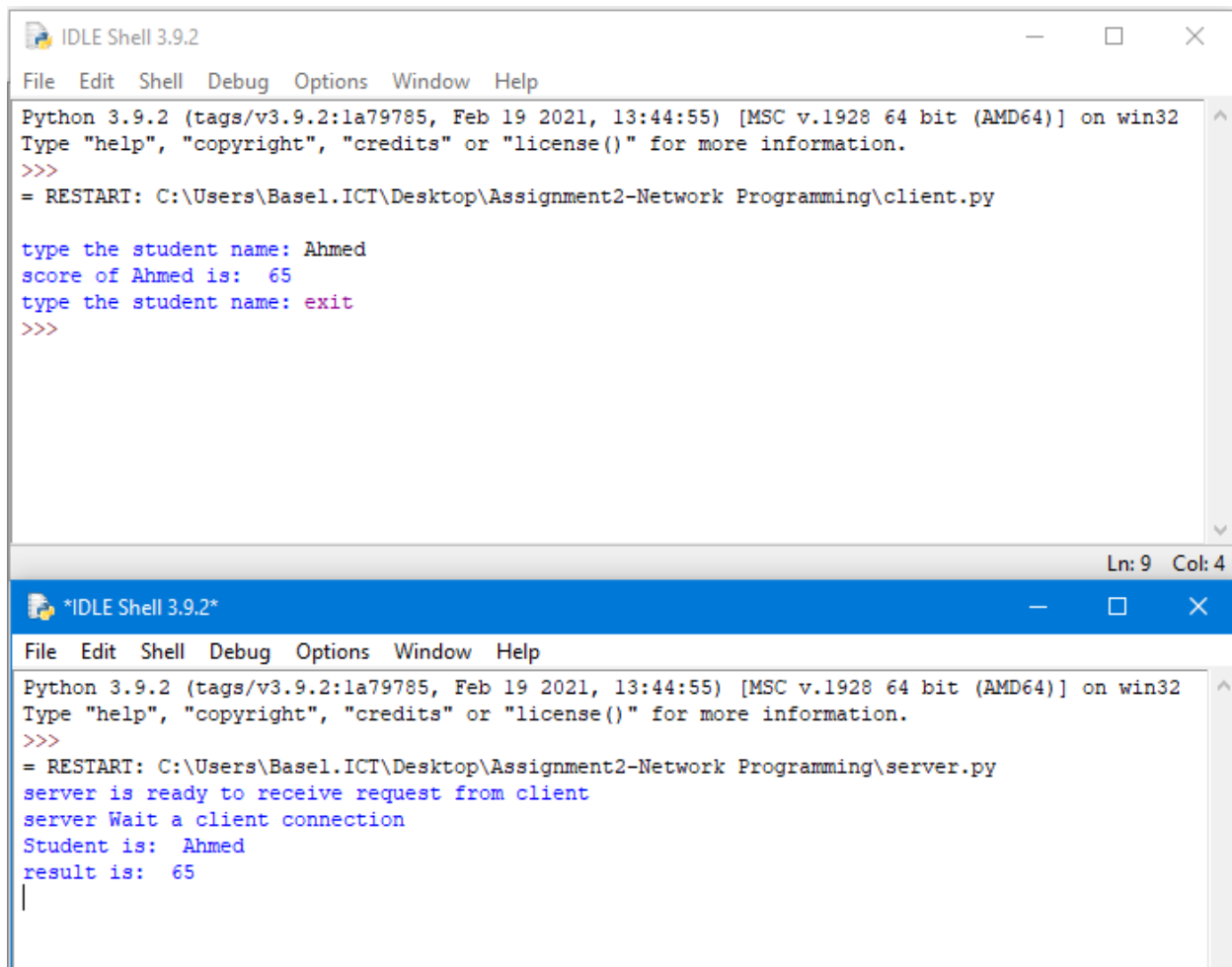
gi_win = client.recv(2048).decode()
print(gi_win)

while True:
    s_t = input("type the student name: ")
    client.send(s_t.encode()) #send encoded name of student to server
    if s_t == 'exit':
        break
    msg = client.recv(2048).decode()
    print("score of "+s_t+" is: ", msg)

client.close()
```

Now I'll show you the result of each connection between server and Client :

The result of the 1<sup>st</sup> communication between server and client :

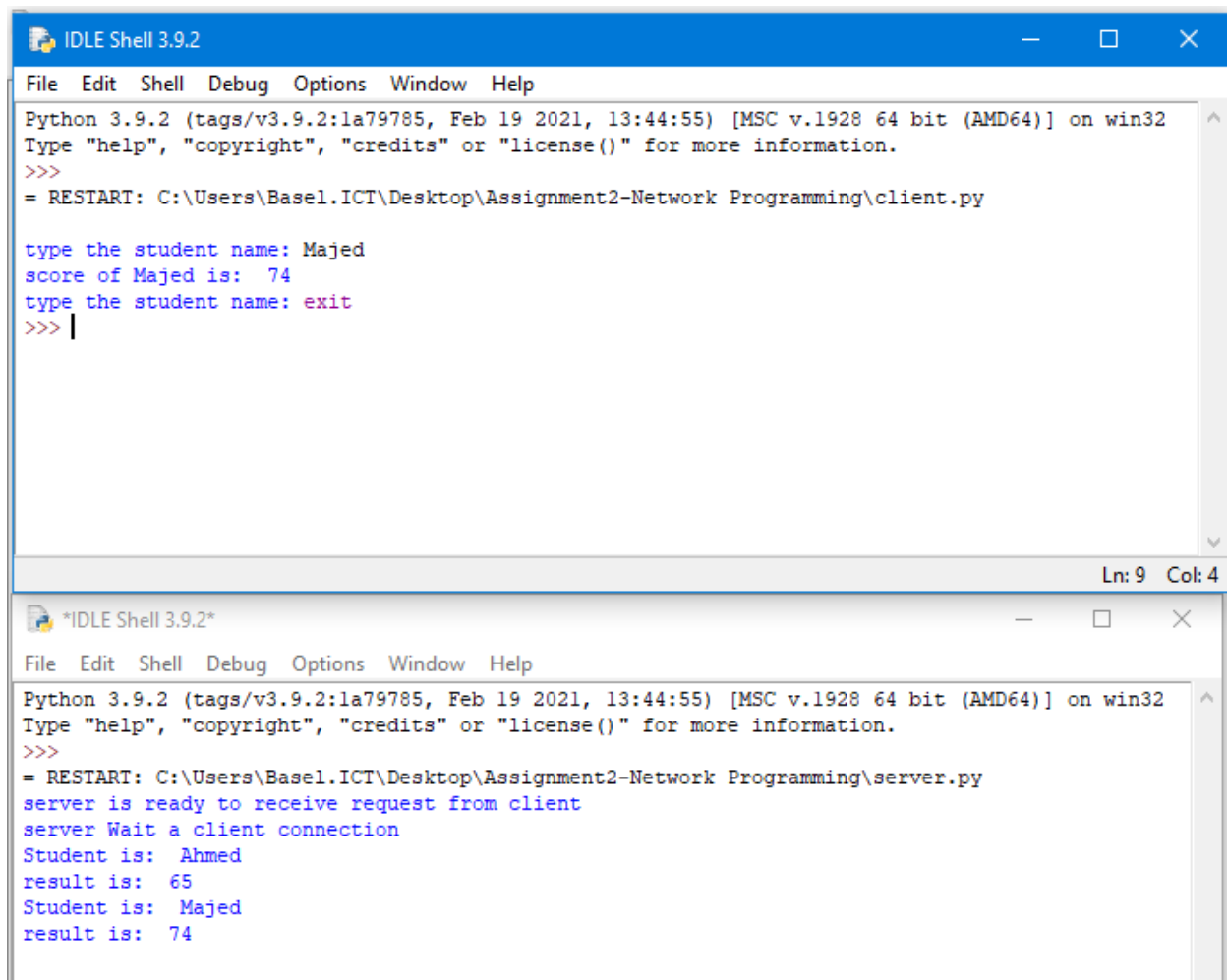


```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\client.py

type the student name: Ahmed
score of Ahmed is: 65
type the student name: exit
>>>
```

```
*IDLE Shell 3.9.2*
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\server.py
server is ready to receive request from client
server Wait a client connection
Student is: Ahmed
result is: 65
|
```

The result of the **2nd** communication between server and client :



The image shows two overlapping windows of the IDLE Shell 3.9.2 Python interpreter. The top window is running a client program, and the bottom window is running a server program. The client program prompts for a student name and then prints the score. The server program prints messages indicating it is ready to receive a request and then prints the student name and score received from the client.

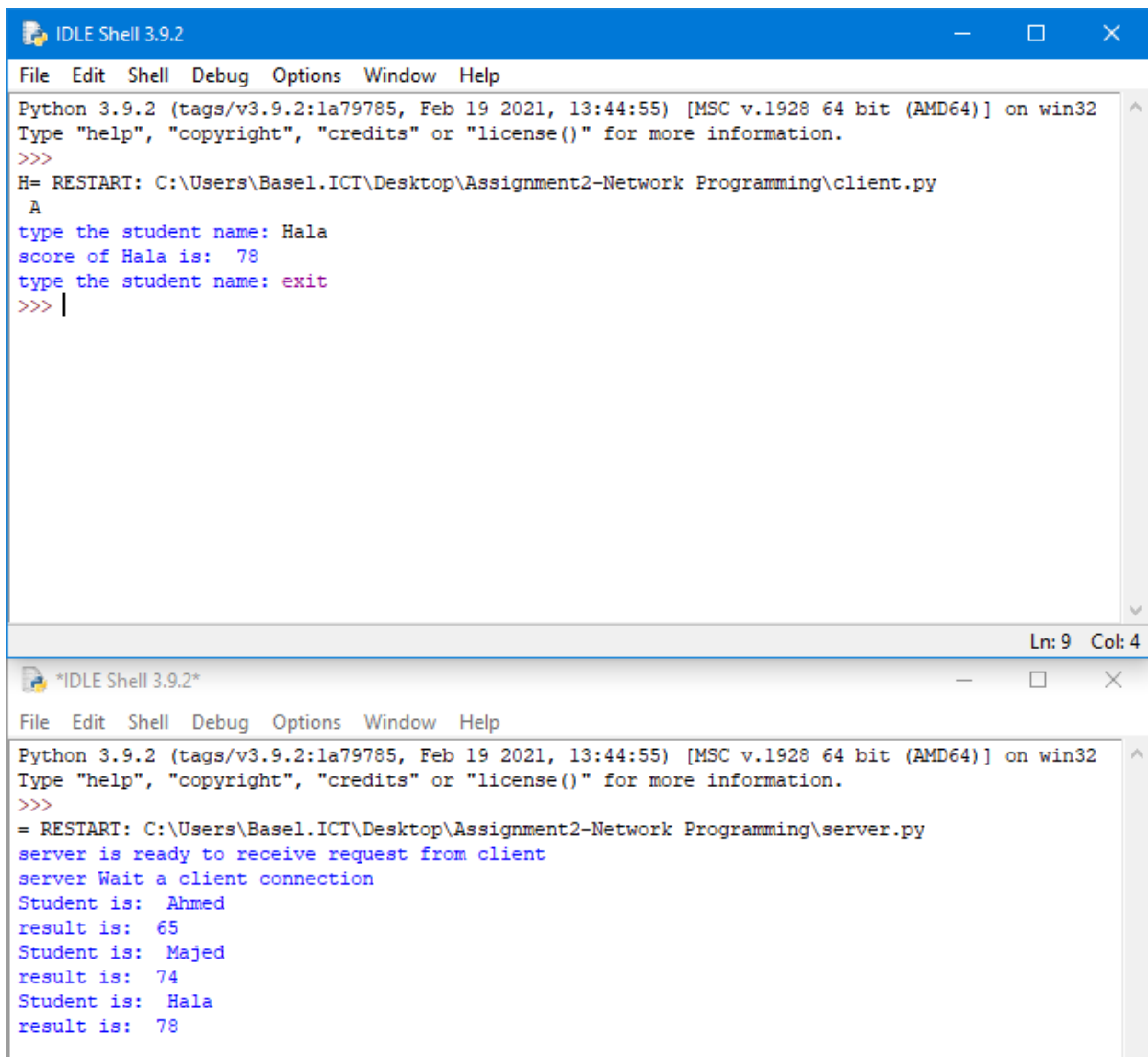
```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\client.py

type the student name: Majed
score of Majed is: 74
type the student name: exit
>>> |
```

Ln: 9 Col: 4

```
*IDLE Shell 3.9.2*
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\server.py
server is ready to receive request from client
server Wait a client connection
Student is: Ahmed
result is: 65
Student is: Majed
result is: 74
```

The result of the **3rd** communication between server and client :

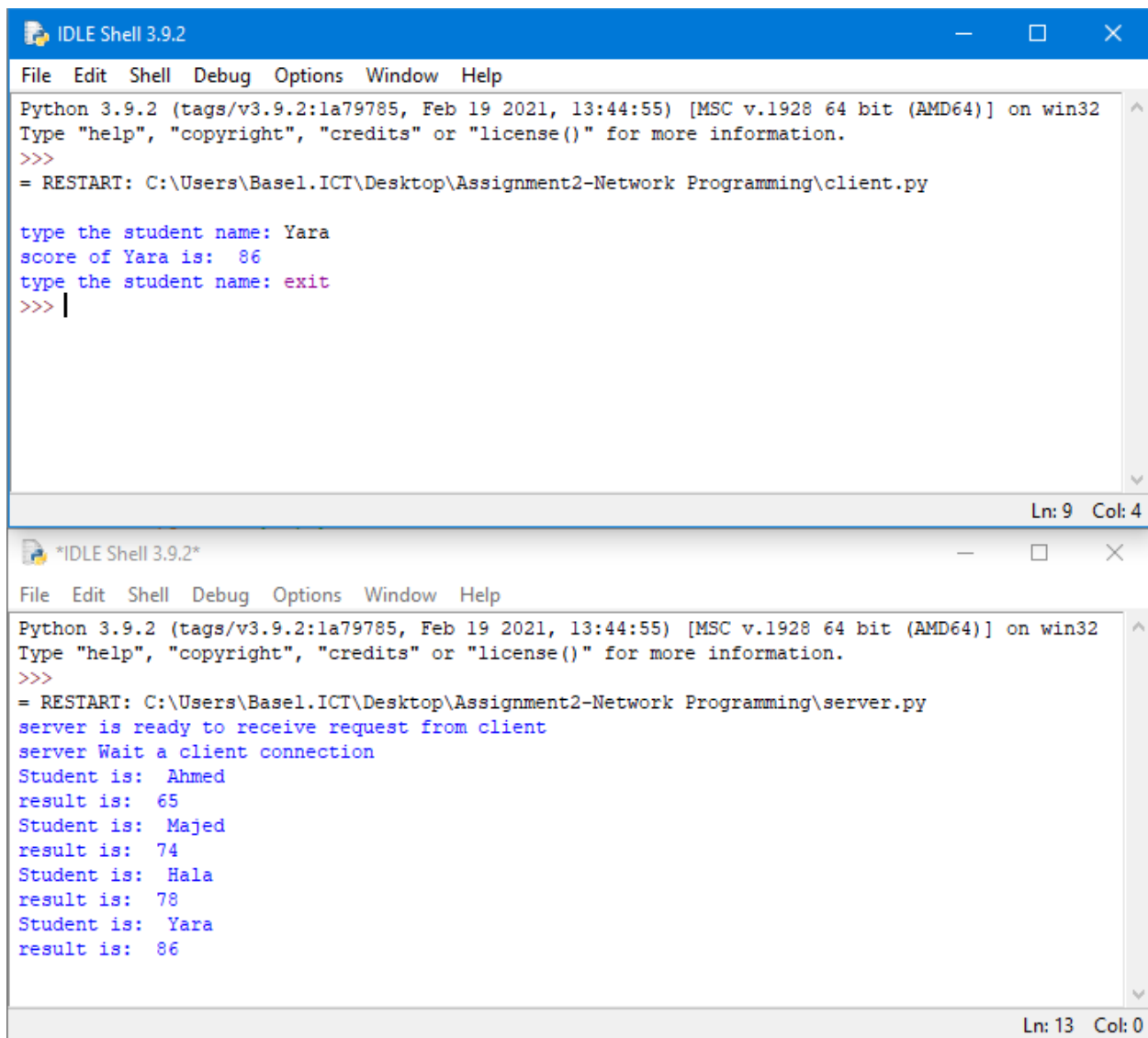


```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
H= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\client.py
A
type the student name: Hala
score of Hala is: 78
type the student name: exit
>>> |

Ln: 9 Col: 4

*IDLE Shell 3.9.2*
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\server.py
server is ready to receive request from client
server Wait a client connection
Student is: Ahmed
result is: 65
Student is: Majed
result is: 74
Student is: Hala
result is: 78
```

The result of the **4th** communication between server and client :



The image shows two windows of the Python IDLE Shell 3.9.2. The top window is running a client program (client.py) and the bottom window is running a server program (server.py).

**Top Window (client.py):**

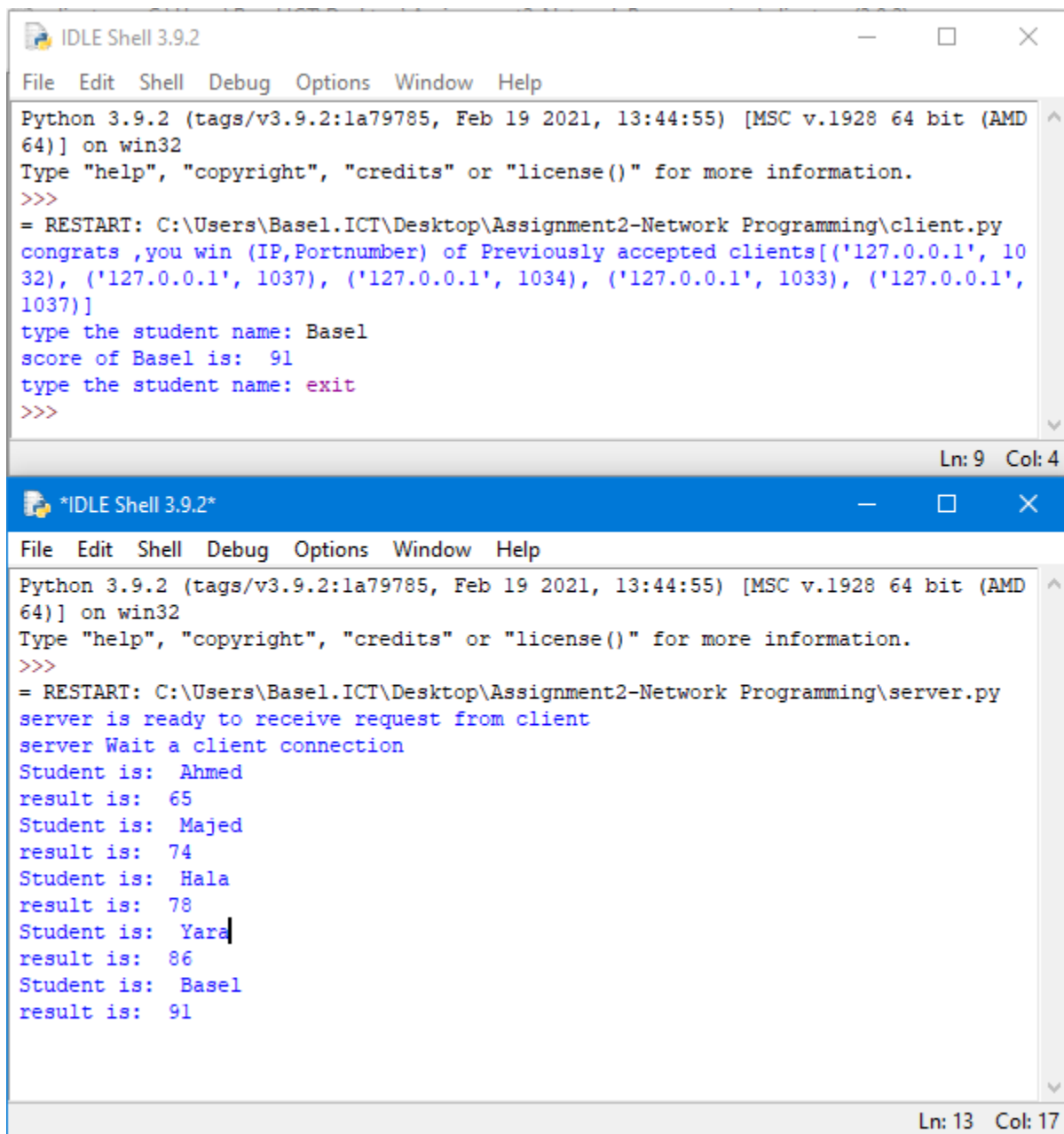
```
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\client.py

type the student name: Yara
score of Yara is: 86
type the student name: exit
>>> |
```

**Bottom Window (server.py):**

```
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\server.py
server is ready to receive request from client
server Wait a client connection
Student is: Ahmed
result is: 65
Student is: Majed
result is: 74
Student is: Hala
result is: 78
Student is: Yara
result is: 86
```

The result of the **5th** communication between server and client :



The image shows two overlapping windows of the IDLE Shell 3.9.2. The top window displays the execution of a client program (client.py). It shows the program starting, displaying a list of previously accepted clients, and then processing a request for a student named 'Basel', resulting in a score of 91. The bottom window displays the execution of a server program (server.py). It shows the server starting, waiting for a client connection, and then processing a series of requests from clients named Ahmed, Majed, Hala, Yara, and Basel, returning scores of 65, 74, 78, 86, and 91 respectively.

```
IDLE Shell 3.9.2
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD 64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\client.py
congrats ,you win (IP,Portnumber) of Previously accepted clients[('127.0.0.1', 1032), ('127.0.0.1', 1037), ('127.0.0.1', 1034), ('127.0.0.1', 1033), ('127.0.0.1', 1037)]
type the student name: Basel
score of Basel is: 91
type the student name: exit
>>>
Ln: 9 Col: 4

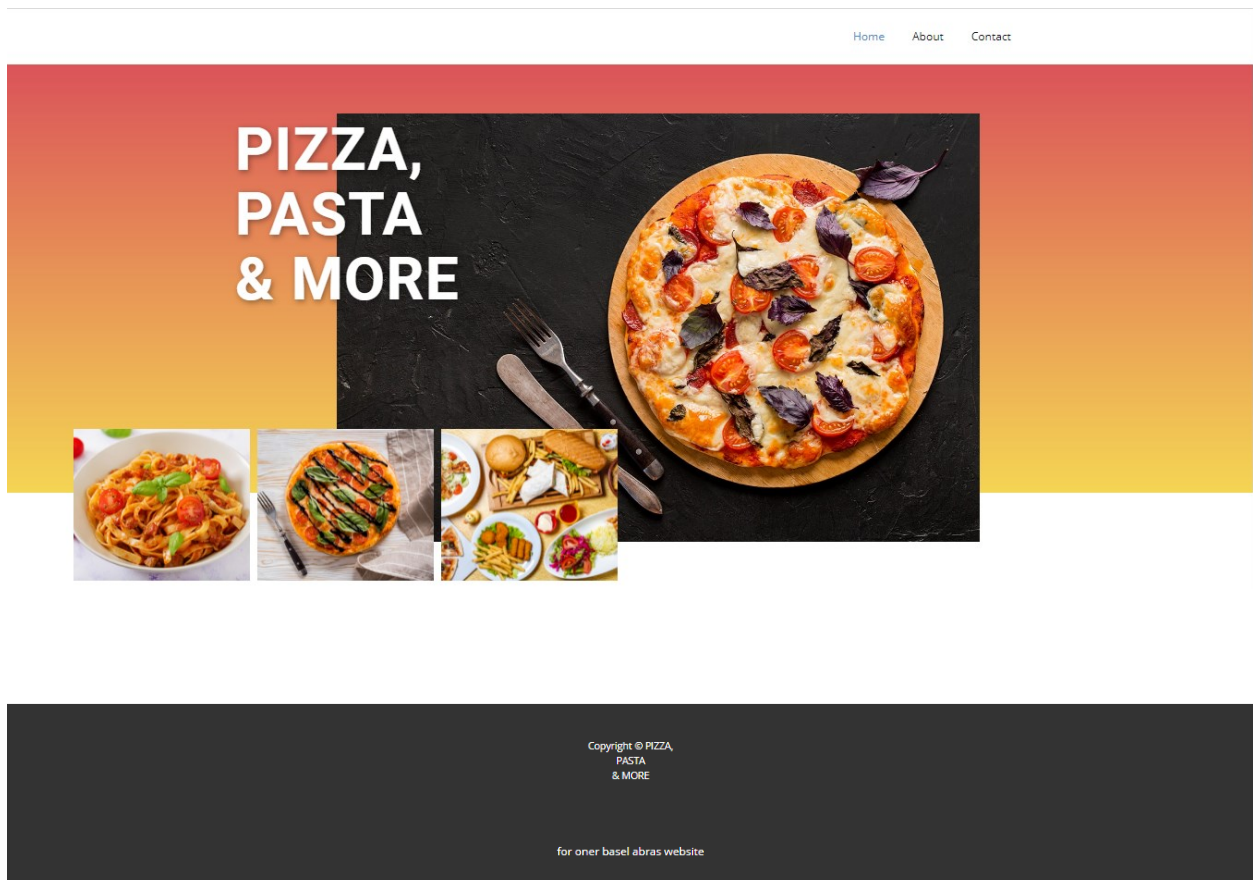
*IDLE Shell 3.9.2*
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD 64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Basel.ICT\Desktop\Assignment2-Network Programming\server.py
server is ready to receive request from client
server Wait a client connection
Student is: Ahmed
result is: 65
Student is: Majed
result is: 74
Student is: Hala
result is: 78
Student is: Yara
result is: 86
Student is: Basel
result is: 91
Ln: 13 Col: 17
```

## Question 2 :

design a website for pizza & Italian food restaurant.

This web site shows the most important services and meals in addition you can contact with the restaurant.

The website contains 3 pages : Home, About, Contact.





# PIZZA, PASTA & MORE

Pizza (Italian: Pizza) is a food that has its origins in the eastern Mediterranean countries such as Greece and Turkey, where they cooked a layer of dough on a hot stone and covered it with different types of ingredients such as meat and vegetables, then the Italian soldiers took it from them to take it to Italy with the addition of tomato sauce and mozzarella cheese. Then Italian immigrants brought it to America, and its sale was initially limited to Italian neighborhoods in major cities in America, and the city of Naples is the center of Italian pizza. It has become known worldwide, and pizza is one of the main meals and can be considered as an appetizer.



So we have our own recipe as well as our own taste by a group of skilled and creative chefs in making pizza

Copyright © PIZZA,  
PASTA  
& MORE

for oner basel abras website .

## follow us



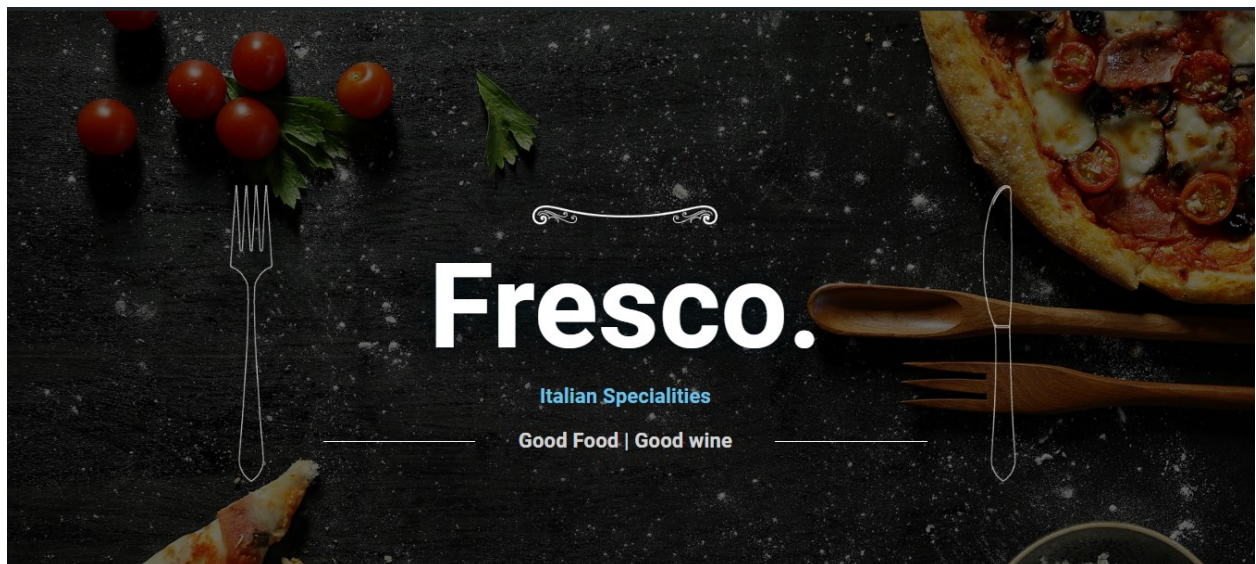
## contact us :

Copyright © PIZZA.  
PASTA  
& MORE

### Question 3 :

design a website for pizza & Italian food restaurant.

This web site shows the most important services and meals in addition you can contact with the restaurant.





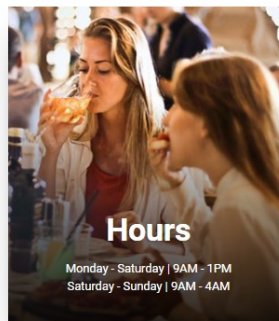
Country's Most Loved!

## Welcome

**We Are Locally Crafted Food & Wine Serving Since 2010.**

we offer most delectuous italian food, pizza, fried chicken.

[More About Us](#) →



## Hours

Monday - Saturday | 9AM - 1PM  
Saturday - Sunday | 9AM - 4AM



## Our Menu

### Ham and Fontina

Roasted eggplant spread, marinated tomatoes.

**\$29.5**



### Chicken Italiano

Tristique perferen possimus neque fermentum vel.

**\$11**



### Spaghetti Delle

Rustic baguette toasted with herb-garlic butter & parmesan

**\$28**



garlic butter & parmesan

**\$28**



### Crumbled Sausage

Natural unpressed ham, fontina, provolone, aioli, fresh tomato

**\$12.5**



### Baked Meatballs

Our handmade meatballs baked in savory marinara with melted cheese

**\$32.5**

[Discover Entire Menu](#) →



# Menu.



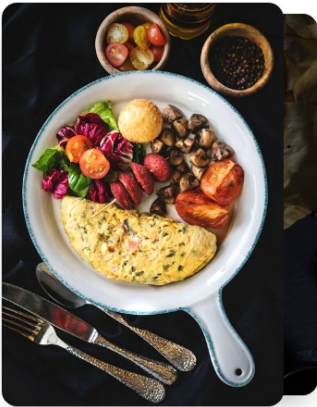
## Pasta

Whole Grain Pasta \$25.00



## Pizza

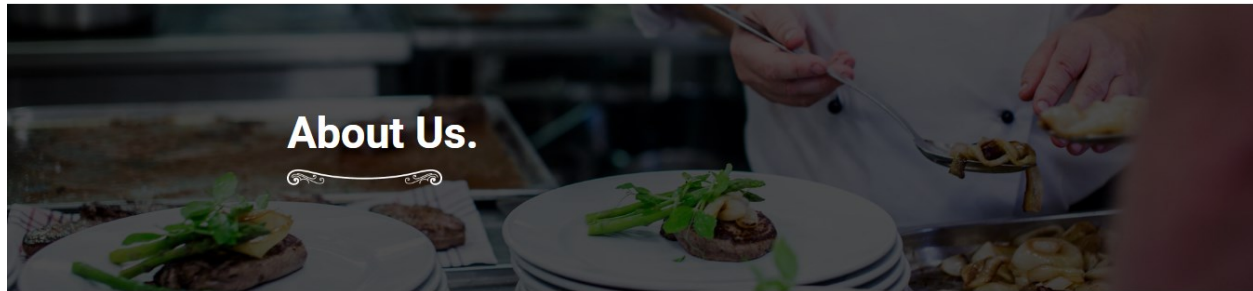
- BBQ Special Pizza** \$12.50  
Roasted eggplant spread, marinated tomatoes with garlic & fresh basil 8
- Spe. Cheesy Cheese** \$12.50  
Roasted eggplant spread, marinated tomatoes with garlic & fresh basil 8
- Mushroom Chilly Pizza** \$12.50  
Roasted eggplant spread, marinated tomatoes with garlic & fresh basil 8
- Chicken BBQ Special** \$25.50  
Roasted eggplant spread, marinated tomatoes with garlic & fresh basil 8



## Platter

- Sautéed Spinach** \$12.50  
Netus integer minus fugit, animi accumsan adipsicing egestas aperiam
- Roasted Butternut Squash** \$12.50  
Roasted eggplant spread, marinated tomatoes with garlic & fresh basil 8
- Crumbled Sausage** \$12.50  
Rerum esse aliquid molestias diamlorem purus atque ante eget, nostra orci cum, condimentum euis
- Vegetable Sauté** \$12.50  
Eius nisl nihil corporis mauris debitis per aliquam laudantium officia ex





**Our Restaurant Is A Collective Of  
Amazing People Striving To Build  
Delightful Italian Cuisine.**

we are a restaurant in lattakia , we started since 2010, best  
italian food we providing you.



 Free WiFi

 Smoking Zone

 Live Music

 Parking

Address : Alziraa, Lattakia

Phone : 041-365-897-965

Email : ital@gmail.com

**Note :** I upload both Assignment1 and Assignment2 on Github :

<https://github.com/BaselECE/Assignment1>

<https://github.com/BaselECE/Assignment2>