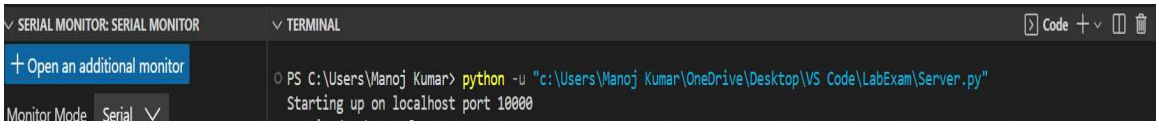
Question 1.

SERVER CODE:

```
import socket

sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)


server_address = ('localhost', 10000)

print('Starting up on {} port {}'.format(*server_address))

sock.bind(server_address)


while True:

    data, address = sock.recvfrom(4096)


    print('Received {} bytes from {}:{}'.format(len(data), *address))

    print(data.decode())


    message = input('Enter your message: ')

    sock.sendto(message.encode(), address)
```

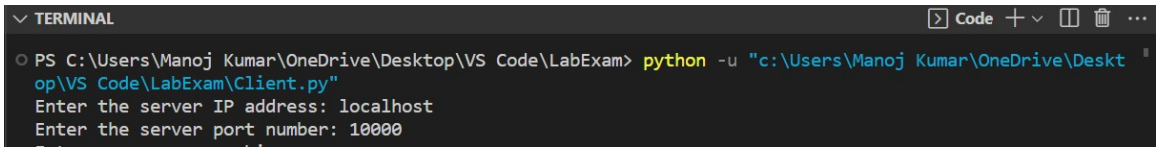


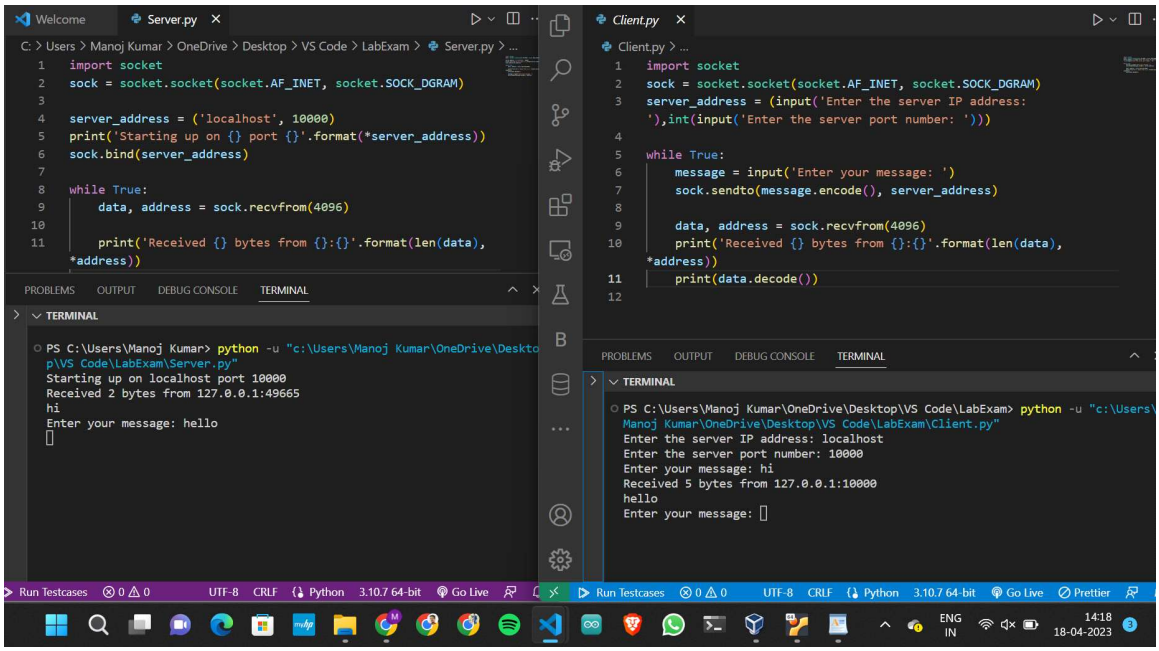
CLIENT CODE:

import socket

sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)

```
server_address = (input('Enter the server IP address:
'),int(input('Enter the server port number: ')))


while True:
    message = input('Enter your message: ')
    sock.sendto(message.encode(), server_address)


    data, address = sock.recvfrom(4096)
    print('Received {} bytes from {}:{}'.format(len(data), *address))
    print(data.decode())
```




Welcome
Server.py
C: > Users > Manoj Kumar > OneDrive > Desktop > VS Code > LabExam > Server.py > ...
import socket
sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)
server_address = ('localhost', 10000)
print('Starting up on {} port {}'.format(*server_address))
sock.bind(server_address)
while True:
data, address = sock.recvfrom(4096)
print('Received {} bytes from {}:{}'.format(len(data), *address))
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
TERMINAL
PS C:\Users\Manoj Kumar> python -u "c:\Users\Manoj Kumar\OneDrive\Desktop\VS Code\LabExam\Server.py"
Starting up on localhost port 10000
Received 2 bytes from 127.0.0.1:49665
hi
Enter your message: hello
Client.py
Client.py > ...
import socket
sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)
server_address = (input('Enter the server IP address: '),int(input('Enter the server port number: ')))
while True:
message = input('Enter your message: ')
sock.sendto(message.encode(), server_address)
data, address = sock.recvfrom(4096)
print('Received {} bytes from {}:{}'.format(len(data), *address))
print(data.decode())
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
TERMINAL
PS C:\Users\Manoj Kumar\OneDrive\Desktop\VS Code\LabExam> python -u "c:\Users\Manoj Kumar\OneDrive\Desktop\VS Code\LabExam\Client.py"
Enter the server IP address: localhost
Enter the server port number: 10000
Enter your message: hi
Received 5 bytes from 127.0.0.1:10000
hello
Enter your message:
Run Testcases UTF-8 CRLF Python 3.10.7 64-bit Go Live
Prettier
ENG IN
14:18
18-04-2023