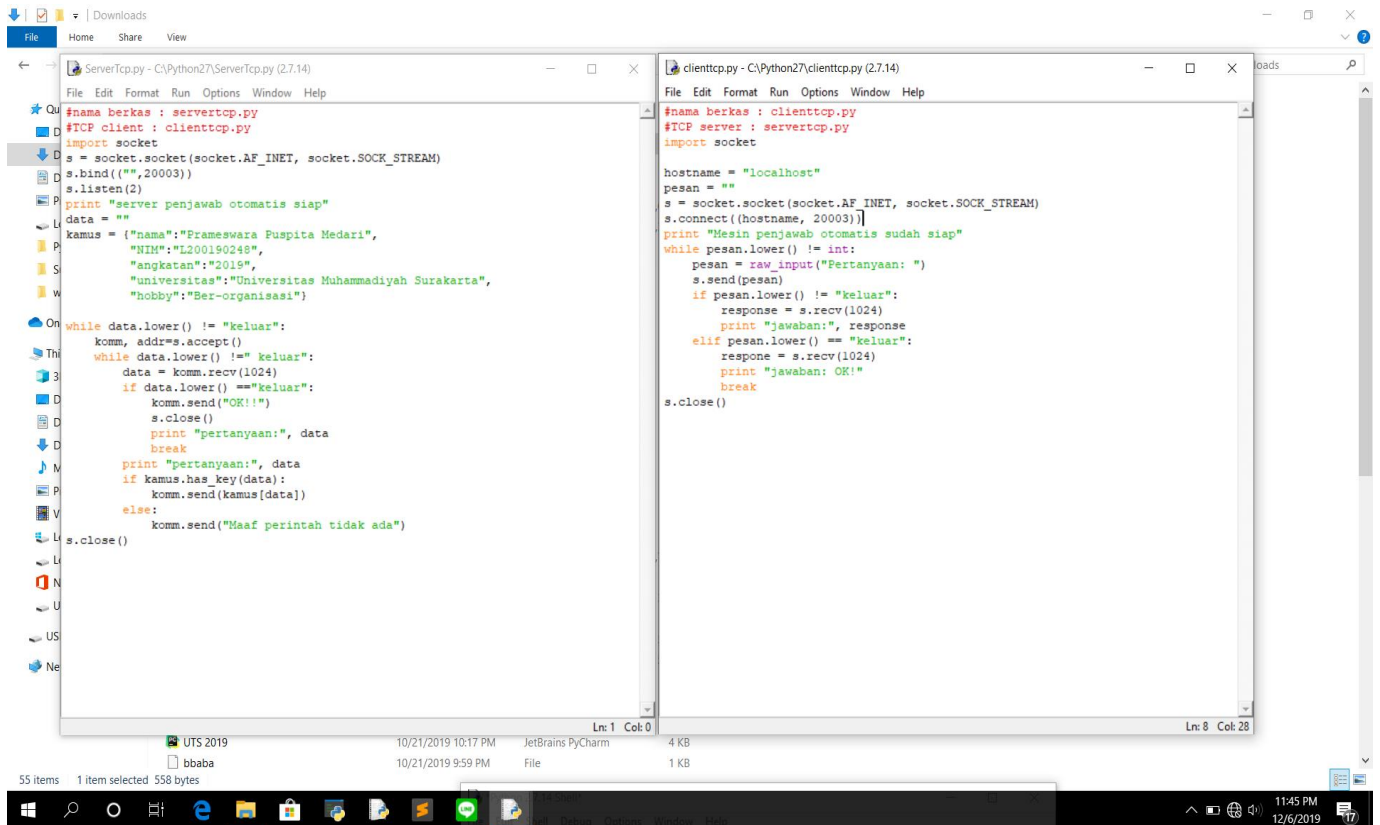


Prameswara PM

L200190248

KELAS E

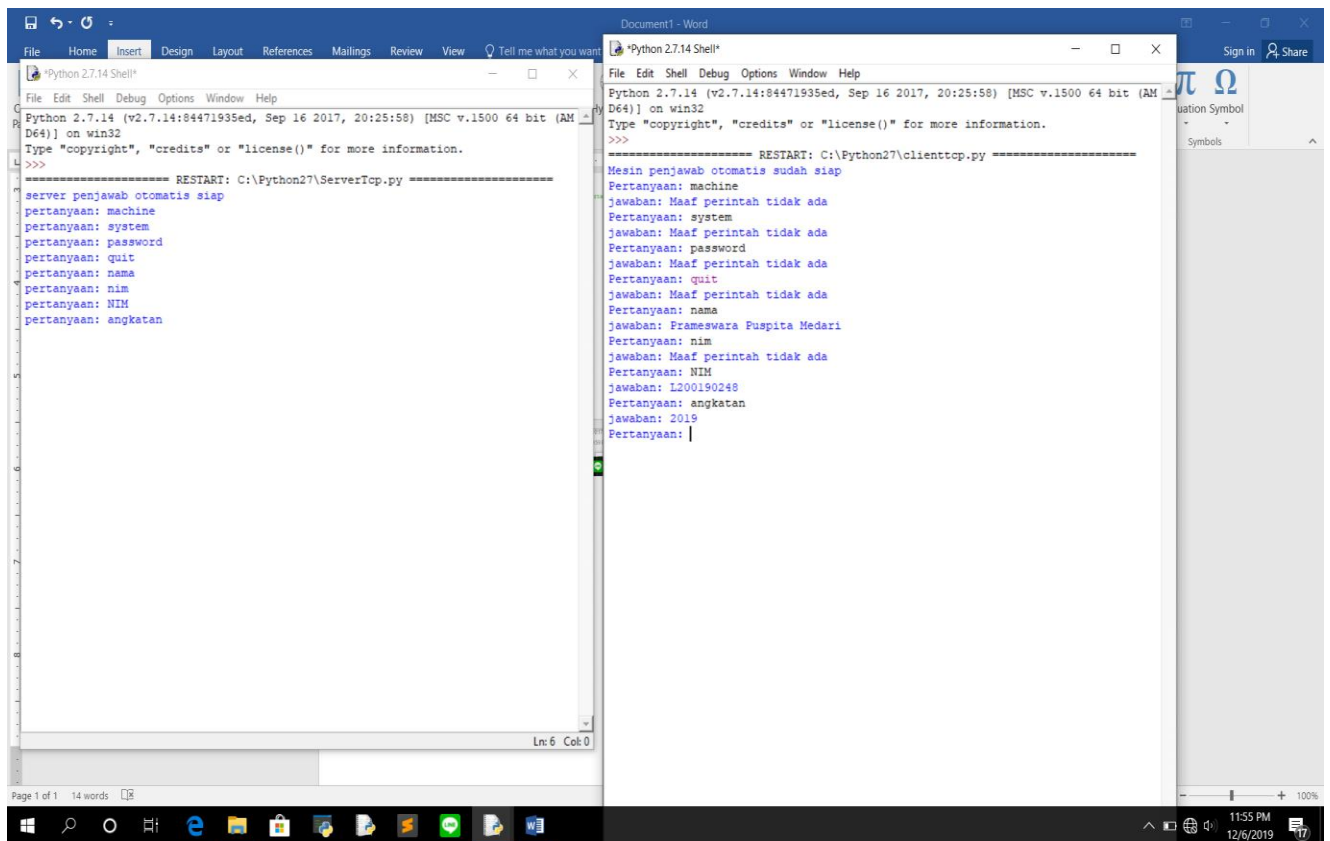
## 1. Kegiatan 1



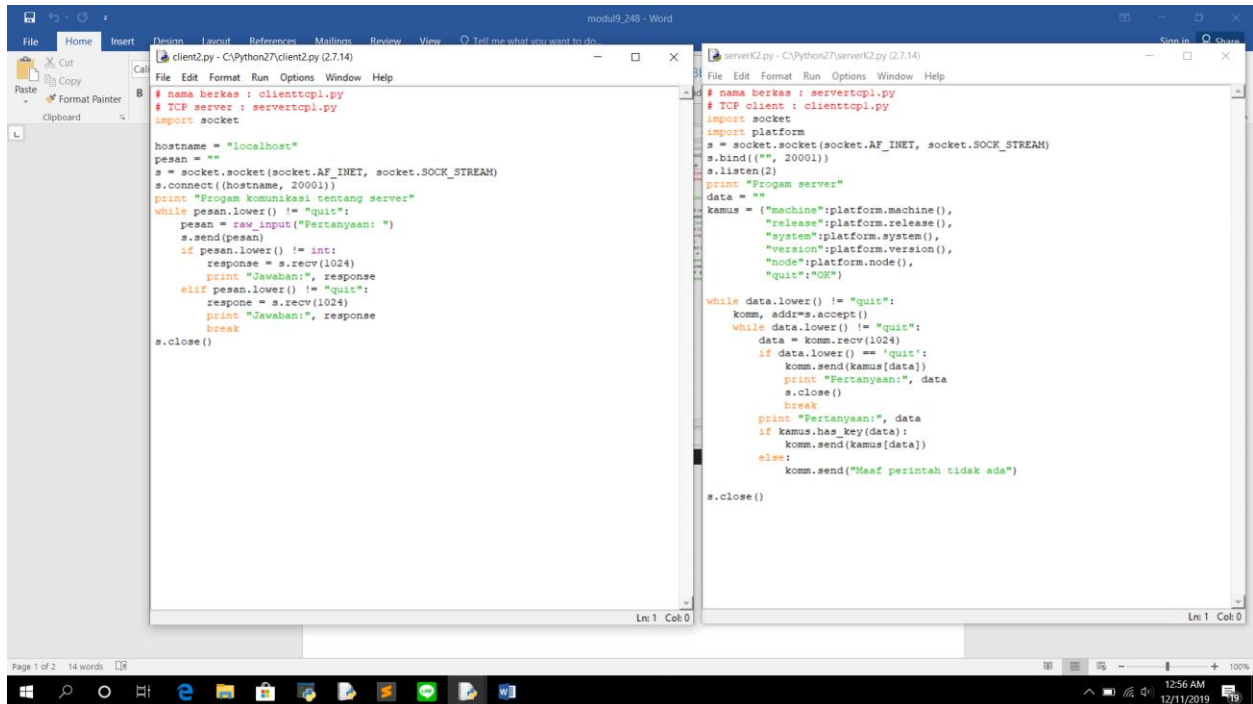
The screenshot shows two overlapping Python IDE windows. The left window, titled 'ServerTcp.py - C:\Python27\ServerTcp.py (2.7.14)', contains the server code. The right window, titled 'clienttcp.py - C:\Python27\clienttcp.py (2.7.14)', contains the client code. Both programs use the socket module to establish a TCP connection on localhost:20003. The server has a predefined dictionary of user information and responds to client queries. The client prompts the user for a question and sends it to the server, which then returns the answer or a message if the command is not found.

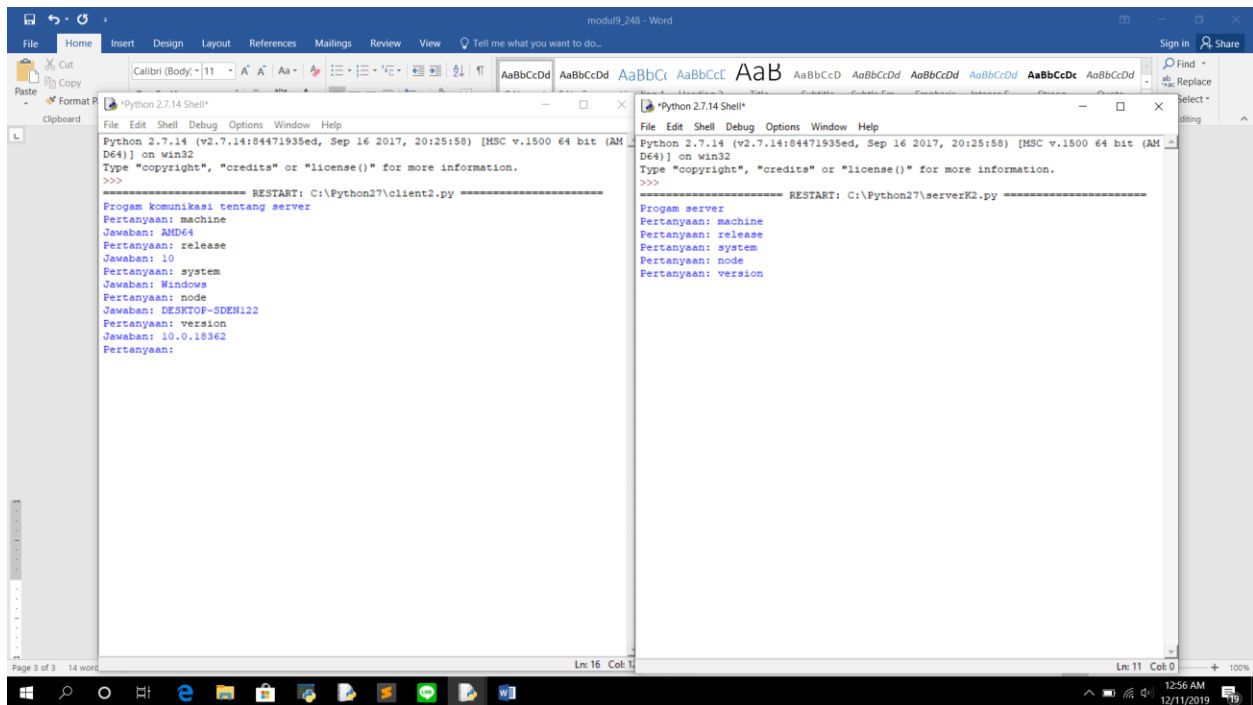
```
# ServerTcp.py
#nama berkas : servertcp.py
#TCP client : clienttcp.py
import socket
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.bind(('',20003))
s.listen(2)
print "server penjawab otomatis siap"
data = ""
kamus = {"nama":"Prameswara Puspita Medari",
"NIM":"L200190248",
"angkatan":"2019",
"universitas":"Universitas Muhammadiyah Surakarta",
"hobby":"Ber-organisasi"}
while data.lower() != "keluar":
    komm, addr=s.accept()
    while data.lower() != "keluar":
        data = komm.recv(1024)
        if data.lower() == "keluar":
            komm.send("OK!!")
            s.close()
            print "pertanyaan:", data
            break
        print "pertanyaan:", data
        if kamus.has_key(data):
            komm.send(kamus[data])
        else:
            komm.send("Maaf perintah tidak ada")
    s.close()

# clienttcp.py
#nama berkas : clienttcp.py
#TCP server : servertcp.py
import socket
hostname = "localhost"
pesan = ""
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((hostname, 20003))
print "Mesin penjawab otomatis sudah siap"
while pesan.lower() != int:
    pesan = raw_input("Pertanyaan: ")
    s.send(pesan)
    if pesan.lower() != "keluar":
        response = s.recv(1024)
        print "jawaban:", response
    elif pesan.lower() == "keluar":
        response = s.recv(1024)
        print "jawaban: OK!"
        break
s.close()
```



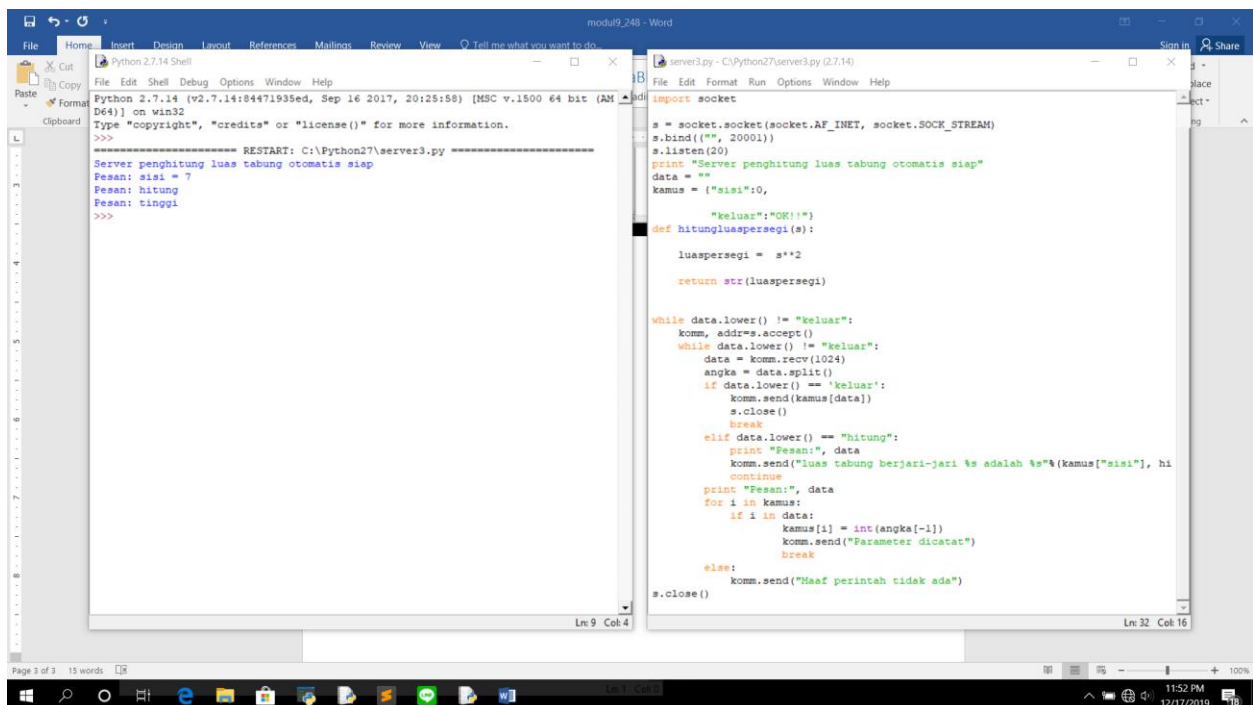
## 2. Kegiatan 2





### 3. Kegiatan 3

#### Server



## Client

The screenshot displays a Windows desktop environment. On the left, a 'Python 2.7.14 Shell' window shows the execution of a client program. The program has restarted and is ready to receive input. The user has entered 'sisal = 7', and the program has responded with 'Jawaban: Parameter dicatat'. The user then entered 'hitung', and the program responded with 'Jawaban: luas tabung berjari-jari 7 adalah 49'. The user entered 'tinggi', and the program responded with 'Jawaban: Raaf perintah tidak ada'. The user entered 'keluar', and the program responded with 'Jawaban: OK!!'. The shell window shows the following output:

```
>>>
===== RESTART: C:/Python27/ClientK3.py =====
Mesin penghitung luas persegi otomatis sudah siap
Pesan: sisal = 7
Jawaban: Parameter dicatat
Pesan: hitung
Jawaban: luas tabung berjari-jari 7 adalah 49
Pesan: tinggi
Jawaban: Raaf perintah tidak ada
Pesan: keluar
Jawaban: OK!!
>>>
```

On the right, a 'modul9\_248 - Word' window shows the source code of the client program, 'ClientK3.py'. The code is as follows:

```
nama_berkas : clienttop2.py
TCP server : servertop2.py
import socket

hostname = "localhost"
pesan = ""
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((hostname, 20001))
print "Mesin penghitung luas persegi otomatis sudah siap"
while pesan.lower() != "keluar":
    pesan = str(raw_input("Pesan: "))
    s.send(pesan)
    if pesan.lower() != int:
        response = s.recv(1024)
        print "Jawaban:", response
    elif pesan.lower() != "keluar":
        response = s.recv(1024)
        print "Jawaban:", response
    break
s.close()
```

The taskbar at the bottom shows the Windows Start button, a search bar, and several application icons. The system clock in the bottom right corner indicates the time is 11:52 PM on 12/17/2019.