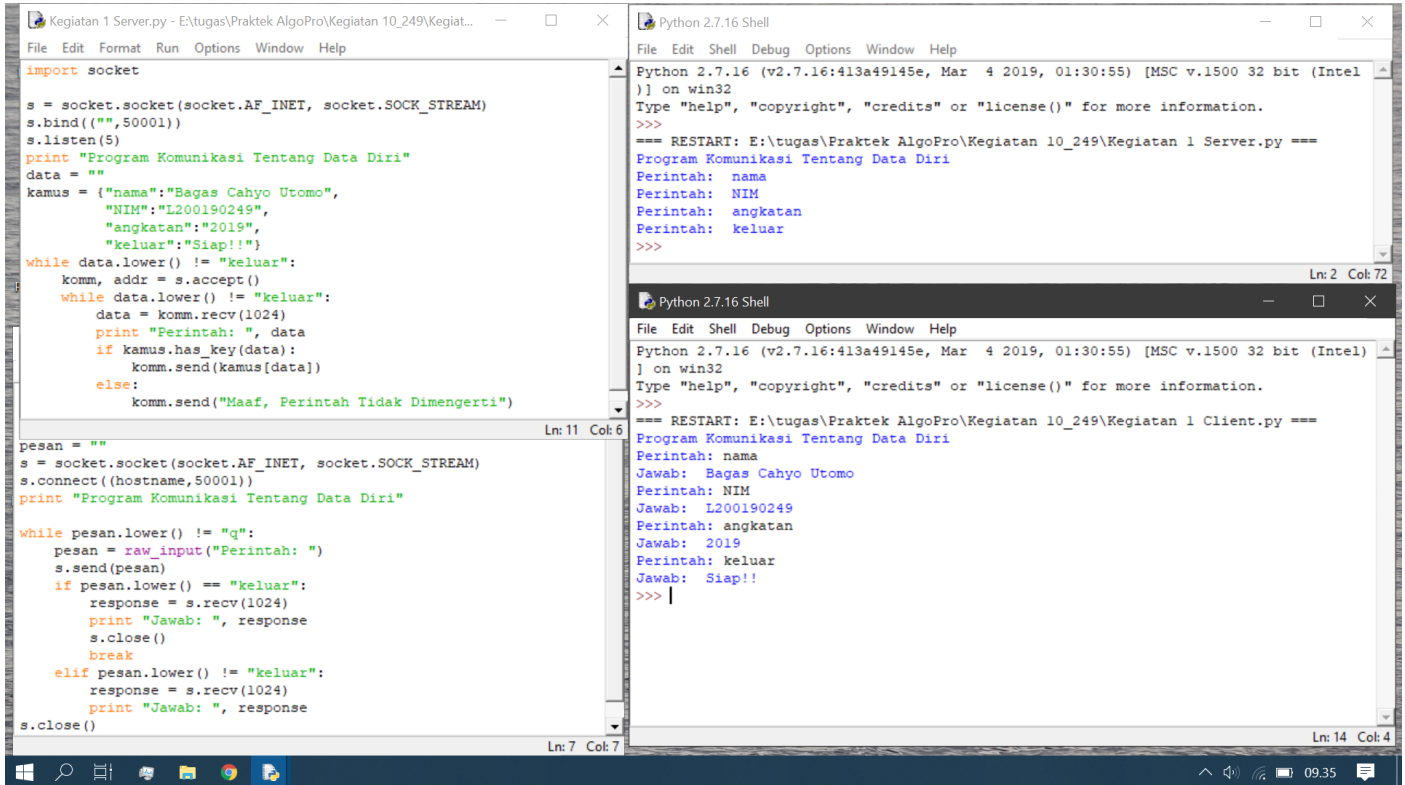


# Praktikum Algoritma dan Pemrograman

## Modul 10

### Kegiatan 1



```
import socket

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.bind(("", 50001))
s.listen(5)
print "Program Komunikasi Tentang Data Diri"
data = ""
kamus = {"nama": "Bagas Cahyo Utomo",
         "NIM": "L200190249",
         "angkatan": "2019",
         "keluar": "Siap!!!" }
while data.lower() != "keluar":
    komm, addr = s.accept()
    while data.lower() != "keluar":
        data = komm.recv(1024)
        print "Perintah: ", data
        if kamus.has_key(data):
            komm.send(kamus[data])
        else:
            komm.send("Maaf, Perintah Tidak Dimengerti")

pesan = ""
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((hostname, 50001))
print "Program Komunikasi Tentang Data Diri"

while pesan.lower() != "q":
    pesan = raw_input("Perintah: ")
    s.send(pesan)
    if pesan.lower() == "keluar":
        response = s.recv(1024)
        print "Jawab: ", response
        s.close()
        break
    elif pesan.lower() != "keluar":
        response = s.recv(1024)
        print "Jawab: ", response
s.close()
```

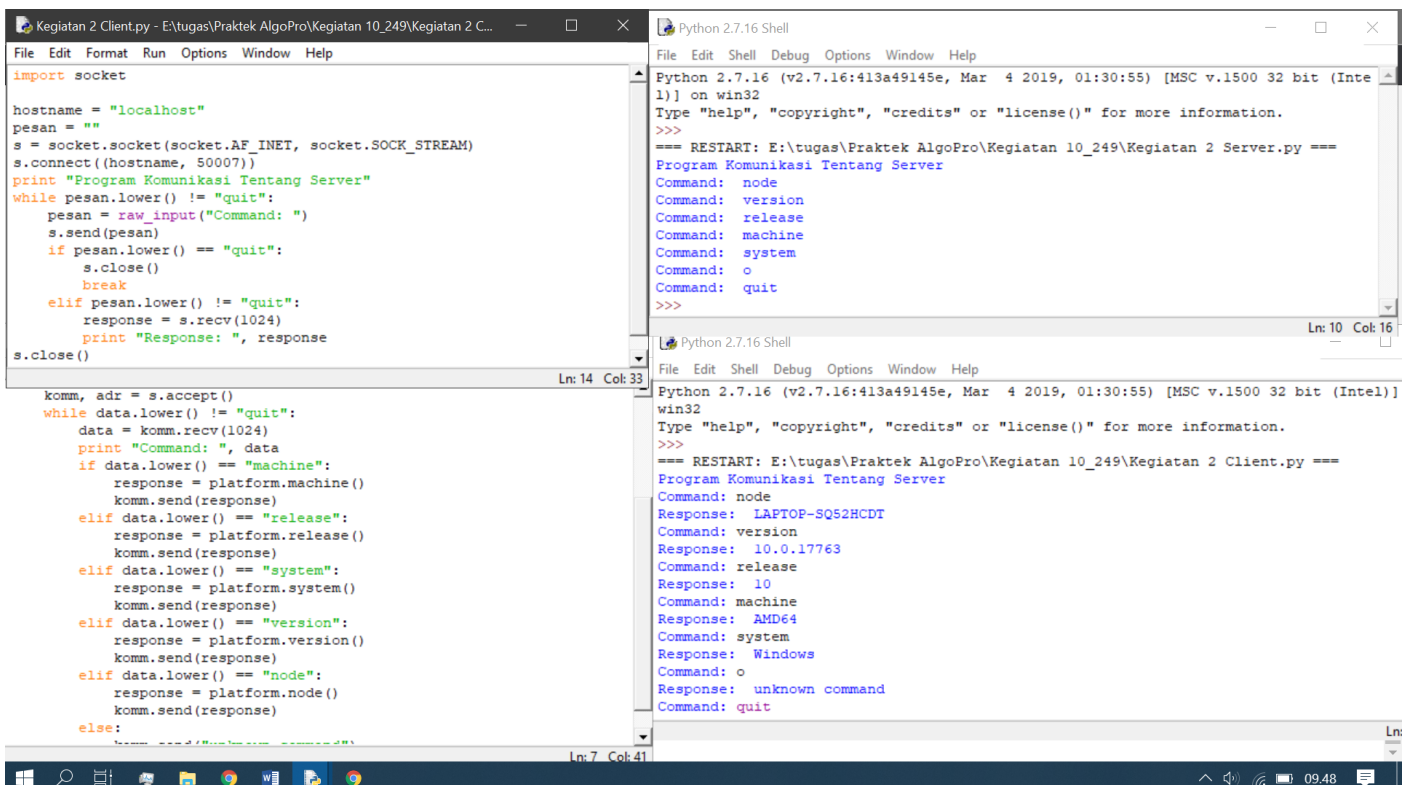
```
Python 2.7.16 (v2.7.16:413a49145e, Mar 4 2019, 01:30:55) [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==== RESTART: E:\tugas\Praktek AlgoPro\Kegiatan 10_249\Kegiatan 1 Server.py ====
Program Komunikasi Tentang Data Diri
Perintah: nama
Jawab: Bagas Cahyo Utomo
Perintah: NIM
Jawab: L200190249
Perintah: angkatan
Jawab: 2019
Perintah: keluar
Jawab: Siap!!!
>>>
```

Ln: 11 Col: 6

Ln: 14 Col: 4

09:35

### Kegiatan 2



```
import socket

hostname = "localhost"
pesan = ""
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((hostname, 50007))
print "Program Komunikasi Tentang Server"
while pesan.lower() != "quit":
    pesan = raw_input("Command: ")
    s.send(pesan)
    if pesan.lower() == "quit":
        s.close()
        break
    elif pesan.lower() != "quit":
        response = s.recv(1024)
        print "Response: ", response
s.close()

komm, adr = s.accept()
while data.lower() != "quit":
    data = komm.recv(1024)
    print "Command: ", data
    if data.lower() == "machine":
        response = platform.machine()
        komm.send(response)
    elif data.lower() == "release":
        response = platform.release()
        komm.send(response)
    elif data.lower() == "system":
        response = platform.system()
        komm.send(response)
    elif data.lower() == "version":
        response = platform.version()
        komm.send(response)
    elif data.lower() == "node":
        response = platform.node()
        komm.send(response)
    else:
        response = "unknown command"
        komm.send(response)
```

```
Python 2.7.16 (v2.7.16:413a49145e, Mar 4 2019, 01:30:55) [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==== RESTART: E:\tugas\Praktek AlgoPro\Kegiatan 10_249\Kegiatan 2 Server.py ====
Program Komunikasi Tentang Server
Command: node
Response: LAPTOP-SQ52HCDT
Command: version
Response: 10.0.17763
Command: release
Response: 10
Command: machine
Response: AMD64
Command: system
Response: Windows
Command: o
Response: unknown command
Command: quit
>>>
```

Ln: 14 Col: 33

Ln: 10 Col: 16

Ln: 7 Col: 41

09:48

## Kegiatan 3

```
Kegiatan 3 Server.py - E:\tugas\Praktek AlgoPro\Modul 10 Python\Kegiatan 3 Server.py (2.7.16)
File Edit Format Run Options Window Help

import socket
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.bind(("", 50002))
s.listen(5)
print "Server sudah siap"
perintah = ""
a = 0
t = 0
while perintah != "keluar":
    komm, addr = s.accept()
    while perintah != "keluar":
        item = komm.recv(1024).lower().split(" = ")
        perintah = item[0]
        if perintah == "keluar":
            komm.send("done")
            s.close()
            break
        print "pesan: ", perintah
        if len(item) == 2:
            if perintah == "alas":
                a = int(item[1])
                komm.send("alas disimpan")
            elif perintah == "tinggi":
                t = int(item[1])
                komm.send("tinggi disimpan")
            else:
                komm.send("Pesan tidak diketahui")
        elif perintah == "hitung":
            l = float(a * t)
            response = "Luas jajargenjang dengan alas {} dan tinggi {} adalah {}".format(a, t, l)
            komm.send(response)
        else:
            komm.send("Pesan tidak diketahui")

Kegiatan 3 Client.py - E:\tugas\Praktek AlgoPro\Modul 10 Python\Kegiatan 3 Client.py (2.7.16)
File Edit Format Run Options Window Help

import socket
hostname = "localhost"
pesan = ""
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((hostname, 50002))
print "Menghitung Luas Jajargenjang"
while pesan.lower() != "keluar":
    pesan = raw_input("pesan: ")
    s.send(pesan)
    if pesan.lower() == "keluar":
        response = s.recv(1024)
        print "Response: -"
        s.close()
        break
    elif pesan.lower() != "keluar":
        response = s.recv(1024)
        print "Response: ", response
s.close()
```

```
Python 2.7.16 Shell
File Edit Shell Debug Options Window Help
Python 2.7.16 (v2.7.16:413a49145e, Mar 4 2019, 01:30:55) [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: E:\tugas\Praktek AlgoPro\Modul 10 Python\Kegiatan 3 Server.py ===
Server sudah siap
pesan: alas
pesan: tinggi
pesan: hitung
>>>

Python 2.7.16 Shell
File Edit Shell Debug Options Window Help
Python 2.7.16 (v2.7.16:413a49145e, Mar 4 2019, 01:30:55) [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: E:\tugas\Praktek AlgoPro\Modul 10 Python\Kegiatan 3 Client.py ===
Menghitung Luas Jajargenjang
pesan: alas = 5
Response: alas disimpan
pesan: tinggi = 10
Response: tinggi disimpan
pesan: hitung
Response: Luas jajargenjang dengan alas 5 dan tinggi 10 adalah 50.0
pesan: keluar
Response: -
>>> |
```