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## **Tugas Kasus Concurrency**

- 1. Menjalankan program sesuai dengan pembahasan
  - a. Jalankan file server pada server (alpine-1)

b. Jalankan File\_interface pada client (alpine-2)

c. Jalankan File\_protocol pada client

```
Pemrograman Jaringan E/progjar4a/tugas4 # python3 file protocol.py
WARNING:root:string diproses: LIST
WARNING:root:memproses request: LIST
{"status": "OK", "data": ["pokijan.jpg", "donalbebek.jpg", "rfc2616.pdf"]}
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
{"status": "OK", "data_namafile": "pokijan.jpg", "data_file": "/9j/4AAQSkZJRgABA
<u>QAAAQ</u>ABAAD/2wCEAAkGBxITEhUSExMVFRUXGBkYFxgYGBgXHRgXFhgYGxgYGhgYHiggGCAlGxcXITElJ
SkrLi4uGiAzODMsNygtLisBCgoKDg0OGxAQGy0mHyYtLSOvLSOtLyOtLSOtLSOtLSOtLSOtLSOtLSOtLSOtL
SOtLSOtLSOtLSOtLSOtLSOtLSOtLf/AABEIALwBDAMBEQACEQEDEQH/xAAcAAABBQEBAQAAAAAAAAAAA
<u>AAFAAMEBqcCAQj/xABJEAABAwIEAwQGBwUFBwQDAAABAqMRAAQ</u>FEiExBkFREyJhcQcygZGhaRQjQlJyw
dfTYpLh8BUzg7KzJDRDc4KiwhYl0vEXNaP/xAAaAQACAwEBAAAAAAAAAAAAAAAABAgADBAUG/8QAOxEAA
gECBAMFBwIFBAIDAAAAAAECAxEEEiExBUFRE2FxsfAiMoGRocHRQuEUI1Jy8RUzNLIkQwaCkv/aAAwDA
QACEQMRAD8A1Ti7iJNkz2hTmUo5UJ6qI+QGp8usUYq4G7Gd/wDqC8cXmVdLAOuVKQqDwj+ZqyyK8zG/7
avNctw97VTRshczJthit6RBuHJ01J/rr8KV2DmYRbv7r9u4d0o3pdCXZ0t7i4UlJ7dyee2tBsOo+3dXJ
M9qsecH5CluHUccurgH+9V8P0pHIbU7bvH/ANor4fpS52FJktp97ms/D9KGdjqJJbdc+8Znw291TOw5R
wLc+8fh+1DOx1AfbK+ajRUmRxR6CrqaGZksj2VdamaXUlonozdTQzS6ktHoLvdTRzS6ktEXe60M0upLR
```

d. Jalankan File client cli pada client

- Membuat program untuk client yang melakukan request file pokijan ipg 100 kali.
  - a. Screenshot program

```
from file client_cli import remote_get
import time
import datetime
import threading
import socket

def request_pokijan():
    texec = dict()
    daftar = 'pokijan.jpg'

catat_awal = datetime.datetime.now()
    for k in range(100):
        print(f"mengirim {k}")
        texec[k] = threading.Thread(target=remote_get, args=(daftar,))
        texec[k].start()

for k in range(100):
        texec[k].join()

catat_akhir = datetime.datetime.now()
selesai = catat_akhir - catat_awal
        print(f"Waktu TOTAL yang dibutuhkan {selesai} detik {catat_awal} s/d {catat_akhir}")

if __name__ == '__main__':
        request_pokijan()
```

b. Hasil run program

```
mengirim 0
mengirim 1
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
mengirim 2
mengirim 3
mengirim 4
 mengirim 5
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
mengirim 6
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
mengirim 7
VARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:data received from server:
mengirim 8
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
mengirim 9
mengirim 10
mengirim 11
mengirim 12
mengirim 13
mengirim 14
mengirim 15
 engirim 16
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
```

```
WARNING:root:sending message
WARNING:root:data received from server:
mengirim 93
MARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
mengirim 94
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
mengirim 95
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
engirim 96
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
engirim 97
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
mengirim 98
MARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
mengirim 99
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
Waktu TOTAL yang dibutuhkan 0:00:02.243415 detik 2021-07-21 06:16:10.515128 s/d
2021-07-21 06:16:12.758543
/Pemrograman Jaringan E/progjar4a/tugas4 # 🗌
```