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## Tugas Kasus Concurrency

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

```
/Pemrograman_Jaringan_E/progjar4a/tugas4 # python3 file_server.py
WARNING:root:server berjalan di ip address ('192.168.122.211', 8889)
```

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

[illegible]

- c. Jalankan File\_protocol pada client

[illegible]

- d. Jalankan File client cli pada client

```
/Pemrograman_Jaringan_E/progjar4a/tugas4 # python3 file_client_cli.py
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
WARNING:root:data received from server:
daftar file :
- pokijan.jpg
- donalbebek.jpg
- rfc2616.pdf
/Pemrograman_Jaringan_E/progjar4a/tugas4 #
```

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

```

1  from file_client_cli import remote_get
2  import time
3  import datetime
4  import threading
5  import socket
6
7
8  def request_pokijan():
9      texec = dict()
10     daftar = 'pokijan.jpg'
11
12     catat_awal = datetime.datetime.now()
13     for k in range(100):
14         print(f"mengirim {k}")
15         texec[k] = threading.Thread(target=remote_get, args=(daftar,))
16         texec[k].start()
17
18     for k in range(100):
19         texec[k].join()
20
21     catat_akhir = datetime.datetime.now()
22     selesai = catat_akhir - catat_awal
23     print(f"Waktu TOTAL yang dibutuhkan {selesai} detik {catat_awal} s/d {catat_akhir}")
24
25
26 if __name__ == '__main__':
27     request_pokijan()

```

b. Hasil run program

```
/Pemrograman_Jaringan_E/progjar4a/tugas4 # python3 request_pokijan.py
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
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: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
WARNING: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
mengirim 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
WARNING: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
mengirim 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:
mengirim 97
WARNING:root:connecting to ('192.168.122.211', 8889)
WARNING:root:sending message
mengirim 98
WARNING: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:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING: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:
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 #
```