

Tugas Implementasi Program Server



OLEH :

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Pemrograman Jaringan - D

DOSEN PENGAMPU :

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Tugas

1. Jalankan program server seperti dalam pembahasan.
2. Buatlah program client yang dapat melakukan 100 request get pada dalam satu saat untuk operasi get file “pokijan.jpg”.

Jawab

1. Set alpine 1 sebagai server dan alpine 2 sebagai client.
2. Mengedit file file_server.py pada folder progjar4a dan arahkan “ip_address” ke IP Address Alpine 1 (server) dan ganti port menjadi 7777. Lalu mengedit file file_client_cli dan arahkan ip address ke IP Address Alpine 1 (server) dan buka command pada line 70 “remote_get(‘donalbebek.jpg’)” serta ganti port menjadi 7777. Pada folder progjar4a tambahkan file multi_process.py yang diambil dari progjar3/concurrency serta modifikasi beberapa bagian seperti pada library, urls = ‘pokijan.jpg’, target=remote_get, dan range sebanyak 100.
3. Masukkan semua file pada progjar4a ke repositori github baru, link github = <https://github.com/rykz-s/Progjar4a>
4. Lakukan clone repository github pada repository yang baru dibuat ke alpine 1 dan alpine 2

```
ryukazuas@LAPTOP-ED7BOT6G x ryukazuas@LAPTOP-ED7BOT6G x + v
inet addr:192.168.122.129 Bcast:192.168.122.255 Mask:255.255.255.0
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:60 errors:0 dropped:0 overruns:0 frame:0
TX packets:14 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:12248 (11.9 KiB) TX bytes:3732 (3.6 KiB)

lo    Link encap:Local Loopback
      inet addr:127.0.0.1 Mask:255.0.0.0
      inet6 addr: ::1/128 Scope:Host

      UP LOOPBACK RUNNING MTU:65536 Metric:1
      RX packets:0 errors:0 dropped:0 overruns:0 frame:0
      TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

/ # mkdir home/work
/ # cd home/work/
/home/work # git clone https://github.com/rykz-s/Progjar4a.git
Cloning into 'Progjar4a'...
remote: Enumerating objects: 20, done.
remote: Counting objects: 100% (20/20), done.
remote: Compressing objects: 100% (18/18), done.
remote: Total 20 (delta 4), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (20/20), done.
/home/work # ls
Progjar4a
/home/work # cd Progjar4a
/home/work/Progjar4a # ls
```

5. Jalankan file_server.py pada alpine 1 karena alpine 1 diset sebagai server.

5. Menjalankan file_client_cli.py pada alpine 2(client) maka akan muncul seperti berikut ini

```
ryukazuas@LAPTOP-ED7BOT6G x ryukazuas@LAPTOP-ED7BOT6G x ryukazuas@LAPTOP-ED7BOT6G x + -
Um/ZYGxbjBHVmKRLPqQ18Y8/KtNLGUot04LPhU3JK5qHddq43asoI9vTA9yRprXVMTmroqnSUZNXL6c0HHXUMXSJKWcyXgPuKIX1gEGfxTsDV8WZmZhb3Wm
h0qPQqHL7FQ2ATrMbaddT+VZKuHLN6CuDLseYLiyXrxsonuocBkRvL/SjToSpwd+dhoRcU7l5t76q3EZMJXLV0IyYTs7wHQqjxP8qTKOpHd+00SMqsjg9RU
SAeikyMyTzEjwIIBpJQjJwmrrlsCUVNWYDuOKPoxAu2XGh+0Q00a0u+cCuzPMC574Y5a0pJ922z9fEodJrYkMekGyCFOJfLIenuqn3EVRlhGJ5L60thKcQXfe
lft05atmdZccAATtqEifeSOWhq+npPnXenRfk30JKTs/L+4MRfLSgtxz0s6q72g/Xzq2cIR0hGyPYGmLB3km+7bwQUwrHG7dSn3cwQEKE2E7EHbySazV6Eq6
UI9VuZeOYVWXC2h+l5n4JO/mQuLeOrS7ZQw0XM5eZUJSE6BYPWrsHwuthqjqStbLln3HkMEv/Ip/wB0fNArHQ2pLQcIk+prmmB0j8604RSz6Ht+KzjGg4t9C
XwDxE5buhm4B8dygGRmQD3SnNEX8qmPwWdXicLtY47Ddk9Jrb138+8u2J8eWCUlDucBQgpKRqD0dM22tY1wmvCyfieftKL03KRw36QxavrtipS7LMezUofW
InvAGTqJMVvxeALx02dlPS/Q0lW5mZWJvHHH1o/ZustqczLyAHL0clXctT0miTvwDacIXfDEXqtTZK59zRkUWmdcM8TXLrrip1aVqKcmUEAKCepT6vPWNCTv
sduNw9CS7J+PgddDcNniaDnt08V+SxD0hWSUgurrU0r7q0k/FEgjrLr4RWteFpd6f50Pww1WjLJUio+88f9IvPlibUVRM5RqgFXIsoTv0B3FaaPCkv67RRWo
N6TfFeU+ov3BBUdkjUR0gbDoD4zW+UoUoKLR2XPqen4Vwtr+ZWXgn5sPt8R2to0LJzzGchKOpid/AD2VgqYCriJZ1b4s5PF6c3iG3a3Jdy/IEv8XReXCXUJO
RpHdzjVc5j70/9grdQqzw1BxdryFL16uNwiiu2zy5a/HkQ8TXdCDLQ2patpTJA36U8a1roJvzxlnljQDmGlyLxSVFQIIEEBOx+FNKwmmW0KFTu30s1qWLX
FSZACHSQJICNCRqYPOsiwFXdWseT4eUJuKd0iq2jxTdm5DbwZCLEDxWYzkkER5n4Cu4yLS7N+8aXSk6Kk/D6kjGuKXG3EJKgrTQgDZQ00um0VXQws4TUm
ZYU2ncqjuIL0IV4bZv47Ct9i90wRw7GHwGJXovXVWo5Ax46Vnr4aNRd5Z29RbMmYbilxf0i0YworWDqSQkAAySd4Anas0cBCLu0i200rp7m94LZrYZQ044px
SZLcJTM10sJECtdlyKJTCndh6KgoCc4Mw5SipVmxJ1JyAT7BAo3YL16TWbh42tGf4RQJLQ6nhOxGotWf4RUJLR7/wClbKZ+joHLIHuBihLRmqPWOGbRB3DKd
TOSqjyBOLDJHOtKiUMItx/wW/4B+LTJHoSx2MNZH/cb/hFTJHoE7Fk1+zR/CKGSPQHxglqre3ZPm2g/LTWSIQn+DcOX61lbn/CQPKKa7Iejg/DwABZ24A2h
pA+MUrSe5ZGr0Hu4tr4j60HLMBwzPX1E+fSk7KHRF/8AHYnbtJfNkkYwx+xa/gT+LHs49EVvFVn+uXZyjhVvIPYtSNjktI9sUySwXKpkTvjJlm0oyptBPU
pBPVio2Fuz02jF3EfwiHlXQftan9T+Z4bNv9mj+EfpUSSFc5S3b0hboAgITHSBRBc6DSfuJ3ChYmZ9RFLP3R7hRI23uehAHE6oA9qEPahBVCCQE0VD+pNQg
pqEPZqEI93ZNOCHG0LH76Rq5ioQr17wHhbb71kxz9VOTcifuUijmZAO/60cLgF7IgTI9Z208JUY9LHMfYBfhzhWytglxi3bbXZwJVB3GYr40GyB9xaoEP/Z"
}
/home/work/Progjar4a # python3 file_client_cli.py
WARNING:root:connecting to ('192.168.122.19', 6666)
WARNING:root:sending message
WARNING:root:data received from server:
daftar file :
- pokijan.jpg
- donalbebek.jpg
- rfc2616.pdf
WARNING:root:connecting to ('192.168.122.19', 6666)
WARNING:root:sending message
WARNING:root:data received from server:
/home/work/Progjar4a #
```

6. Lakukan command ls pada direktori Progjar4a maka file donalbebek.jpg akan muncul

```
/home/work/Progjar4a # ls
PROTOKOL.txt      ovcache      file_client_cli.py  file_protocol.py    files
README.md         donalbebek.jpg file_interface.py   file_server.py      multi_process.py
/home/work/Progjar4a #
```

7. Untuk melakukan 100 request get maka jalankan multi_process.py pada alpine 2 (client) maka akan muncul seperti berikut pada alpine 2(client)

```
ryukazuas@LAPTOP-ED7BOT6G x ryukazuas@LAPTOP-ED7BOT6G x + -
/home/work/Progjar4a # nano file_client_cli.py
/home/work/Progjar4a # python3 multi_process.py
mendownload GET [0]
mendownload GET [1]
mendownload GET [2]
mendownload GET [3]
mendownload GET [4]
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
mendownload GET [5]
mendownload GET [6]
mendownload GET [7]
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
mendownload GET [8]
mendownload GET [9]
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:sending message
mendownload GET [10]
mendownload GET [11]
```

```
nyukazuas@LAPTOP-ED7BOT6G x nyukazuas@LAPTOP-ED7BOT6G x + v
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
mendownload [98]
mendownload [99]
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:connecting to ('192.168.122.129', 7777)
WARNING:root:sending message
WARNING:root:sending message
WARNING:root:data received from server:
WARNING:root:data received from server:
WARNING:root:data received from server:
Waktu TOTAL yang dibutuhkan 0:00:02.269625 detik 2021-07-02 06:48:03.244668 s/d 2021-07-02 06:48:05.514293
/home/work/Progjar4a #
```

8. Lakukan command ls pada direktori Progjar4a maka file pokijan.jpg telah ada pada direktori

```
/home/work/Progjar4a # ls
PROTOKOL.txt      __pycache__      file_interface.py  file_server.py    multi_process.py
README.md         file_client_cli.py  file_protocol.py  files              pokijan.jpg
```

9. Pada alpine 1 (server) akan terlihat seperti berikut

```
nyukazuas@LAPTOP-ED7BOT6G x nyukazuas@LAPTOP-ED7BOT6G x + v
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:connection from ('192.168.122.134', 39266)
WARNING:root:connection from ('192.168.122.134', 39268)
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:connection from ('192.168.122.134', 39270)
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
WARNING:root:string diproses: GET pokijan.jpg
WARNING:root:memproses request: GET
```