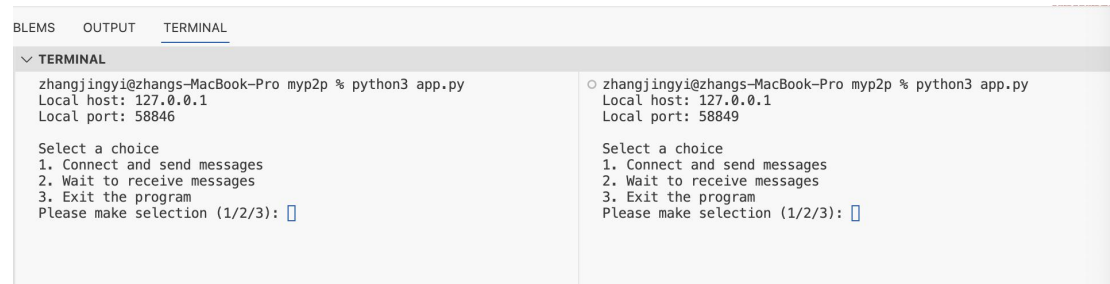


P2P instruction

by JINGYI ZHANG jyz0328@bu.edu

Step1. download database.db , or download database.py and run [python3 database.py] to generate database.

Step2. download app.py, run [python3 app.py] on terminal A and B seperately.



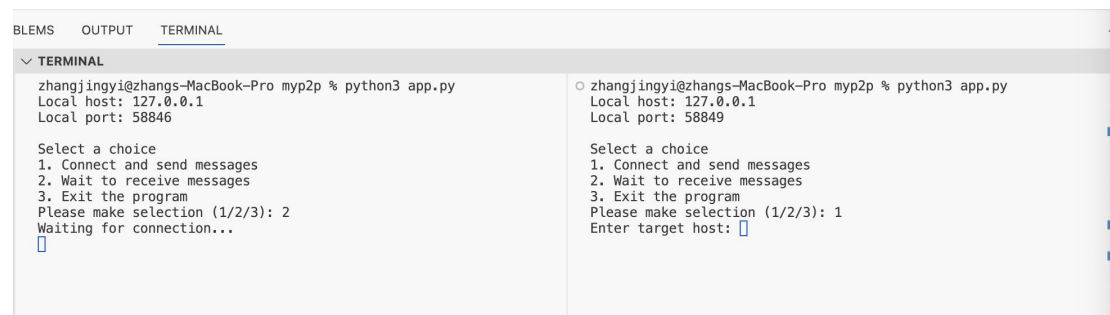
```
BLEMS OUTPUT TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 

○ zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 
```

Step 3.Now you can see on both terminals about the local host information, local port information and selection request. For terminal A, input 2 to waiting for receive message. While for terminal B, input 1 to send message.



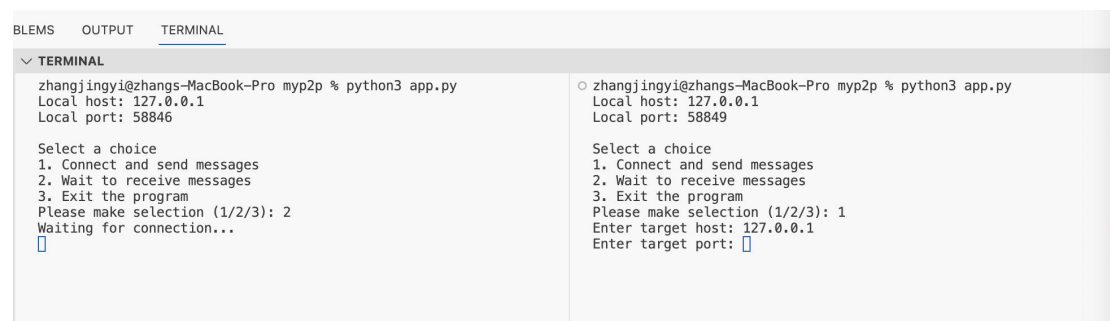
```
BLEMS OUTPUT TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 2
Waiting for connection...
█

○ zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 1
Enter target host: █
```

Step 4.Now for terminal B, enter target host and target port (the host and port you want to send message to, in this situation just enter host and port of terminal A), enter local host and port (the host and port of this current terminal B),and enter message you want to sent.



```
BLEMS OUTPUT TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 2
Waiting for connection...
█

○ zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 1
Enter target host: 127.0.0.1
Enter target port: █
```

```
BLEMS  OUTPUT  TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 2
Waiting for connection...
█

○ zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 1
Enter target host: 127.0.0.1
Enter target port: 58846
Enter message: Nice to meet you
█
```

```
BLEMS  OUTPUT  TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 2
Waiting for connection...
█

○ zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 1
Enter target host: 127.0.0.1
Enter target port: 58846
Enter message: Nice to meet you
Enter current host: 127.0.0.1
Enter current port: 58849
█
```

Step 5. Now you can see the message has been sent to terminal A.

```
BLEMS  OUTPUT  TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 2
Waiting for connection...
Received message from 127.0.0.1:58849: Nice to meet you

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): █

○ zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 1
Enter target host: 127.0.0.1
Enter target port: 58846
Enter message: Nice to meet you
Enter current host: 127.0.0.1
Enter current port: 58849
Message has been sent

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): █
```

```
BLEMS  OUTPUT  TERMINAL
▼ TERMINAL
zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58846

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 2
Waiting for connection...
Received message from 127.0.0.1:58849: Nice to meet you

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 3
Exiting...
zhangjingyi@zhangs-MacBook-Pro myp2p % █

● zhangjingyi@zhangs-MacBook-Pro myp2p % python3 app.py
Local host: 127.0.0.1
Local port: 58849

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 1
Enter target host: 127.0.0.1
Enter target port: 58846
Enter message: Nice to meet you
Enter current host: 127.0.0.1
Enter current port: 58849
Message has been sent

Select a choice
1. Connect and send messages
2. Wait to receive messages
3. Exit the program
Please make selection (1/2/3): 3
Exiting...
○ zhangjingyi@zhangs-MacBook-Pro myp2p % █
```

I also upload a P2P_report for you to better understand my code. You can type 3 or control c to exit the program.