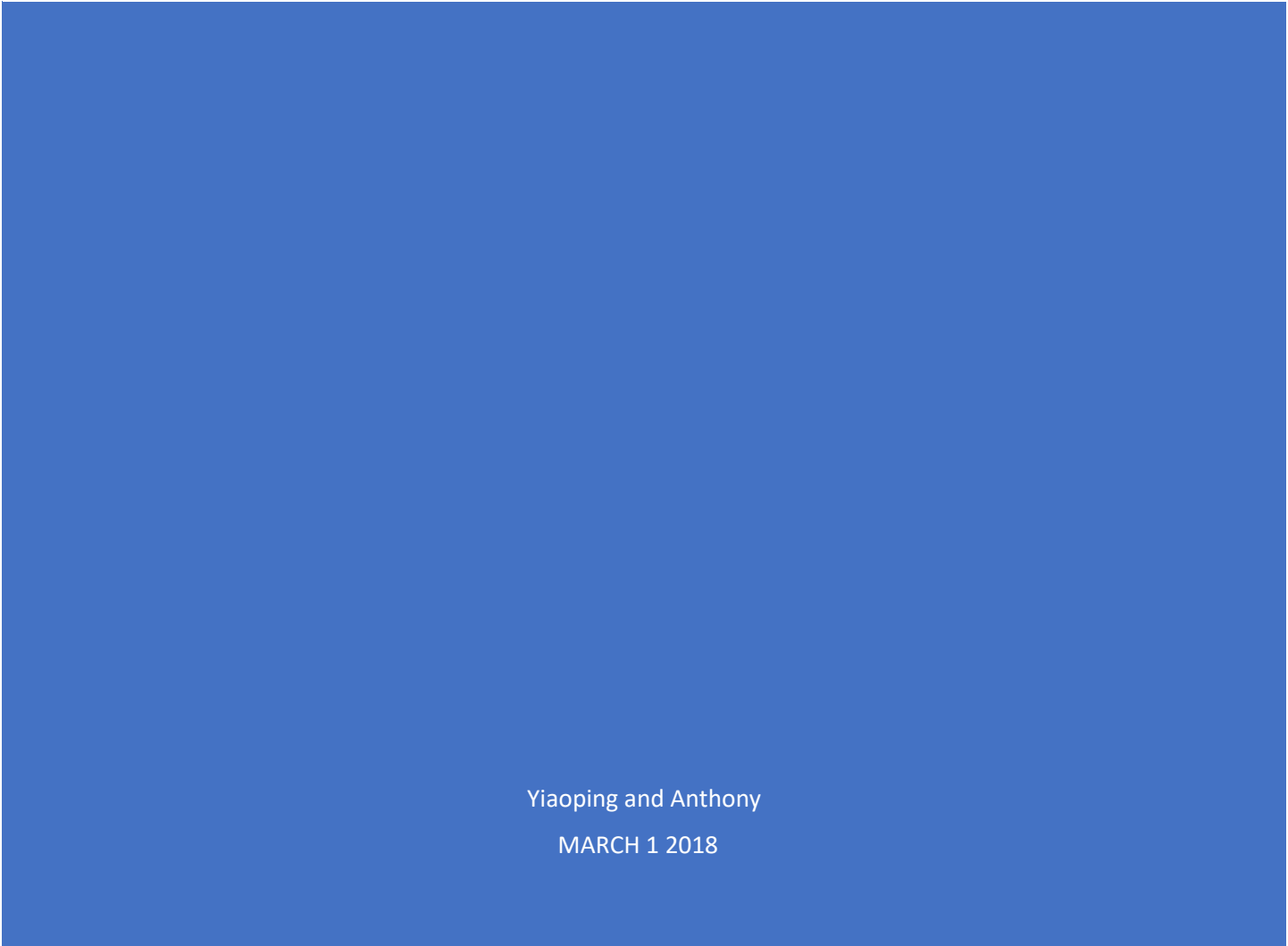


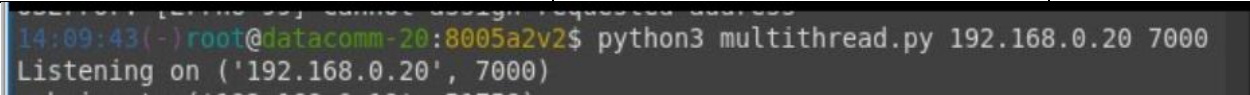
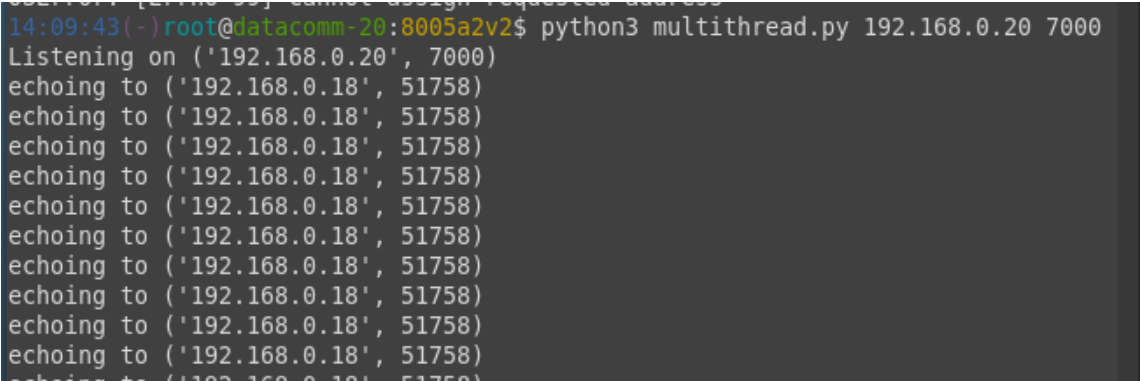
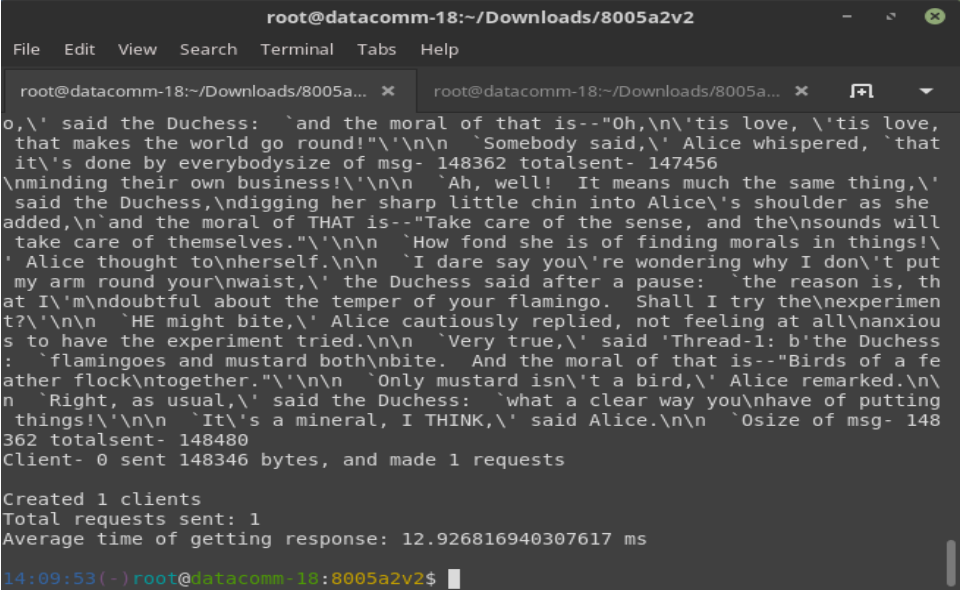


# COMP 8005 ASSIGNMENT TWO TESTING DOCUMENT



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MARCH 1 2018

Test	Test Description	Expected Result	Pass/Fail
1	Test to ensure that the server can run on multithread	Server can run properly without any errors	Pass
	 <pre> 14:09:43(-)root@datacomm-20:8005a2v2\$ python3 multithread.py 192.168.0.20 7000 Listening on ('192.168.0.20', 7000) </pre>		
2	Test to ensure that the client can connect to multithread	Client can connect to server after typing in correct arguments (see help manual)	Pass
	 <pre> 14:09:43(-)root@datacomm-20:8005a2v2\$ python3 multithread.py 192.168.0.20 7000 Listening on ('192.168.0.20', 7000) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) echoing to ('192.168.0.18', 51758) </pre>		
3	Test one file is sent with one request from client to server and back	File successfully sent from client to server and echoed back	Pass
	 <pre> root@datacomm-18:~/Downloads/8005a2v2 File Edit View Search Terminal Tabs Help root@datacomm-18:~/Downloads/8005a... x root@datacomm-18:~/Downloads/8005a... x o,\ ' said the Duchess: `and the moral of that is--"Oh,\n\tis love, \t'is love, that makes the world go round!"\n\n `Somebody said,\ ' Alice whispered, `that it\'s done by everybodysize of msg- 148362 totalsent- 147456 \nminding their own business!\n\n `Ah, well! It means much the same thing,\ ' said the Duchess,\ndigging her sharp little chin into Alice\'s shoulder as she added,\nand the moral of THAT is--"Take care of the sense, and the\nsounds will take care of themselves."'\n\n `How fond she is of finding morals in things!\n ' Alice thought to\nherself.\n\n `I dare say you\'re wondering why I don\'t put my arm round your\nwaist,\ ' the Duchess said after a pause: `the reason is, th at I\'m\ndoubtful about the temper of your flamingo. Shall I try the\nexperimen t?'\n\n `HE might bite,\ ' Alice cautiously replied, not feeling at all\nanxiou s to have the experiment tried.\n\n `Very true,\ ' said 'Thread-1: b'the Duchess : `flamingoes and mustard both\nbite. And the moral of that is--"Birds of a fe ather flock\ntogether."'\n\n `Only mustard isn\'t a bird,\ ' Alice remarked.\n n `Right, as usual,\ ' said the Duchess: `what a clear way you\nhave of putting things!\n\n `It\'s a mineral, I THINK,\ ' said Alice.\n\n `Osize of msg- 148 362 totalsent- 148480 Client- 0 sent 148346 bytes, and made 1 requests  Created 1 clients Total requests sent: 1 Average time of getting response: 12.926816940307617 ms  14:09:53(-)root@datacomm-18:8005a2v2\$ </pre>		

	<pre> emper, and thought to herself that perhaps it was only the pepper that had made her so savage when they met in the kitchen.\n\n  'When I'm a Duchess,' she said to herself, (not in a very\nhopeful tone though), 'I won't have any pepper in my kitchen AT\nALL. Soup does very well without--Maybe it's always pepper that\nmakes peo ple hot-tempered,' she went on, ve'size of msg- 148362 totalsent- 145408 Thread-1: b'ry much pleased at\nhaving found out a new kind of rule, 'and vinegar that makes them\nsour--and c amonile that makes them bitter--and--and barley-sugar\nand such things that make children sweet-tempered. I o nly wish\npeople knew that: then they wouldn't be so stingy about it, you\nknow--'\n\n  She had quite forgott en the Duchess by this time, and was a\nlittle startled when she heard her voice close to her ear.\nYou're th inking about something, my dear, and that makes you\nforget to talk. I can't tell you just now what the moral of that\nis, but I shall remember it in a bit.'\n\n  'Perhaps it hasn't one,' Alice ventured to remark.\n\n 'Tut, tut, child!' said the Duchess. 'Everything's got a\nmoral, if only you can find it.' And she squeezed herself up\n closer to Alice's side as she spoke.\n\n  Alice did not much like keeping so close to her: first, \nbecause the Duchess was VERY ugly; and secondly, because she was\nexactly the right height to rest her chin upon Alice's shoulder,\nand it wassize of msg- 148362 totalsent- 146432 an uncomfortably sharp chin. HowThread-1: b'ever, she did not\nlike to be rude, so she bore it as well as s he could.\n\n  'The game's going on rather better now,\n' she said, by way of\nkeeping up the conversation a l ittle.\n\n  '\nTis so,\n' said the Duchess: 'and the moral of that is--"Oh,\n\n'tis love, \n'tis love, that make s the world go round!"'\n\n  'Somebody said,\n' Alice whispered, 'that it's done by everybodysize of msg- 148 362 totalsent- 147456 \nminding their own business!\n\n\n  'Ah, well! It means much the same thing,\n' said the Duchess,\nndigging he r sharp little chin into Alice's shoulder as she added,\nand the moral of THAT is--"Take care of the sense, and the\nsounds will take care of themselves."'\n\n\n  'How fond she is of finding morals in things!\n' Alice th ought to\nherself.\n\n  'I dare say you're wondering why I don't put my arm round your\nwaist,\n' the Duchess said after a pause: 'the reason is, that I'm\nndoubtful about the temper of your flamingo. Shall I try the\ periment?\n\n\n  'HE might bite,\n' Alice cautiously replied, not feeling at all\nanxious to have the experi ment tried.\n\n  'Very true,\n' said 'Thread-1: b'the Duchess: 'flamingoes and mustard both\nbite. And the mo ral of that is--"Birds of a feather flock\nntogether."'\n\n\n  'Only mustard isn't a bird,\n' Alice remarked.\n\n n  'Right, as usual,\n' said the Duchess: 'what a clear way you\nhhave of putting things!\n\n\n  'It's a miner al, I THINK,\n' said Alice.\n\n  'Osize of msg- 148362 totalsent- 148480 Client- 0 sent 148346 bytes, and made 1 requests </pre>		
4	Test more than 10 files with 10 clients is sent from multithreaded client to server and back	All files are sent from client to server and echoed back	Pass
	<pre> er\nday, I will tell you how the Dsize of msg- 148362 tot Client- 9 sent 1483460 bytes, and made 10 requests  Created 10 clients Total requests sent: 100 Average time of getting response: 6.044423580169678 ms  14:12:04(-) root@datacomm-18:8005a2v2\$ █  Created 50 clients Total requests sent: 50 Average time of getting response: 5247.676482200623 ms  14:45:46(-) root@datacomm-18:8005a2v2\$ █ </pre>		
5	Check connection for multithreaded for maximum connections	Maximum number of connections should be around 1000	Pass
	<pre> 14:21:14(-) root@datacomm-18:8005a2v2\$ netstat -an   grep :7000   grep ESTABLISHED   1000 14:21:16(-) root@datacomm-18:8005a2v2\$ █ </pre>		
6	Check server for total connections that was connected when server is killed	Server should display to user total connections that was connected during its life	Pass


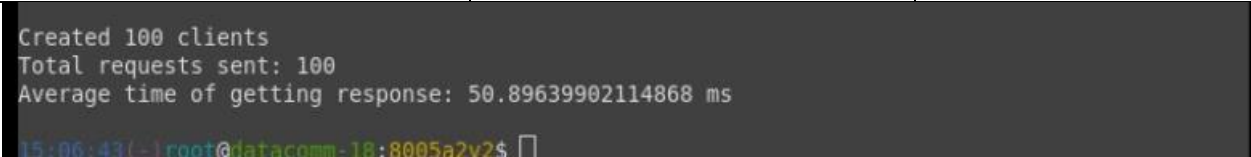
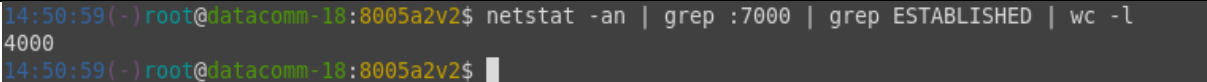
	<pre> closing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) echoing to ('192.168.0.18', 58884) ^CAccepted clients: 253 clients ^[[1;5ATotal data received: 76227976 </pre>	
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Test	Test Description	Expected Result	Pass/Fail
1	Test to ensure that the server can run on select	Server can run properly without any errors	Pass
	<pre> [root@localhost 8005a2v2]# python3 select1.py 127.0.0.1 7000 Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0 ^CTraceback (most recent call last): </pre>		
2	Test to ensure that the client can connect to select server	Client can connect to server after typing in correct arguments (see help manual)	Pass
	<pre> Average time of getting response: 0.11002502710002 ms 14:05:03(-) root@datacomm-18:8005a2v2\$ python3 client2.py 192.168.0.20 7000 10 10 ali Running report... Num active peers = 499 closing ('192.168.0.18', 50724) Running report... Num active peers = 498 Running report... Num active peers = 498 closing ('192.168.0.18', 50726) Running report... Num active peers = 497 closing ('192.168.0.18', 50728) Running report... Num active peers = 496 Running report... Num active peers = 496 closing ('192.168.0.18', 50730) Running report... Num active peers = 495 </pre>		
3	Test one file is sent with one request from client to select server and back	File successfully sent from client to server and echoed back	Pass

	<pre> The Mock Turtle sighed deeply, and began, in a voice sometimes choked with sobs, to sing this:--      'Beautiful Soup, so rich and green,     Waiting in a hot tureen!     Who for such dainties would not stoop?     Soup of the evening, beautiful Soup!     Soup of the evening, beautiful Soup!       Beau--ootiful Soo--oop!       Beau--ootiful Soo--oop!     Soo--oop of the e--e--evening,       Beautiful, beautiful Soup!      'Beautiful Soup! Who cares for fish,     Game, or any other dish?     Who would not give all else for two p ennyworth only of beautiful Soup?     Pennyworth only of beautifsize of msg- 148362 totalsent- 124928 ul Soup?       Beau--ootiful Soo--oop!       Beau--ootiful Soo--oop!     Soo--oop of the e--e--evening,       Beautiful, beauti--FUL SOUP!'      'Chorus again!' cried the Gryphon, and the Mock Turtle had just begun to repeat it, when a cry of 'The trial's beginning!' was heard in the distance.      'Come on!' cried the Gryphon, and, taking Alice by the hand, it hurried off, without waiting for the end of the song.      'What trial is it?' Alice panted as she ran; but the Gryphon only answered 'Come on!' and ran the faster, while more and more faintly came, carried on the breeze that followed them, the melancholy words:--      'Soo--oop of the e--e--evening,       Beautiful, beautiful Soup!'                                  CHAPTER XI                                 Who Stole the Tarts? </pre>		
4	Test more than 10 files is sent from client to select server and back	All files are sent from client to server and echoed back	Pass
			
5	Check connection for select server for maximum connections	Maximum number of connections should be around 1000	Pass

	<pre>14:13:51(-)root@datacomm-18:8005a2v2\$ netstat -an   grep :7000   grep ESTABLISHED   1000 14:14:38(-)root@datacomm-18:8005a2v2\$</pre>
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Test	Test Description	Expected Result	Pass/Fail
1	Test to ensure that the epoll server can run successfully	Server can run properly without any errors	Pass
	<pre>14:46:28(-)root@datacomm-20:8005a2v2\$ python3 epoll_server.py 192.168.0.20 7000  Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0 Running report... Num active peers = 0  15:00:43(-)root@datacomm-18:8005a2v2\$ python3 client2.py 192.168.0.20 7000 4000 1 alice.txt</pre>		
2	Test to ensure that the client can connect to epoll server	Client can connect to server after typing in correct arguments (see help manual)	Pass
	<pre>accepted from ('192.168.0.18', 38644) accepted from ('192.168.0.18', 38646) accepted from ('192.168.0.18', 38648) accepted from ('192.168.0.18', 38650) accepted from ('192.168.0.18', 38652) Running report... Num active peers = 4000 Running report... Num active peers = 4000 Running report... Num active peers = 4000 Running report... Num active peers = 4000 Running report... Num active peers = 4000 Running report... Num active peers = 4000</pre>		

3	Test one file is sent with one request from client to server and back	File successfully sent from client to server and echoed back	Pass
	 <pre> root@datacomm-18:~/Downloads/8005a2v2 neighbouring pool--she could hear the rattle of the teacups as the March Hare and his friends shared their never-ending meal, and the shrill voice of the Queen ordering off her unfortunate guests to execution--once more the pig-baby was sneezing on the Duchess's knee, while plates and dishes crashed around it--once more the shriek of the Gryphon, the squeaking of the Lizard's slate-pencil, and the choking of the suppressed guinea-pigs, filled the air, mixed up with the distant sobs of the miserable Mock Turtle.      So she sat on, with closed eyes, and half believed herself in Wonderland, though she knew she had but to open them again, and all would change to dull reality--the grass would be only rustling in the wind, and the pool rippling to the waving of the reeds--the rattling teacups would change to tinkling sheep- bells, and the Queen's shrill cries to the voice of the shepherd boy--asize of msg- 148362 totalsent- 147456 nd the sneeze of the baby, the shriek of the Gryphon, and all thy other queer noises, would change (she knew) to the confused clamour of the busy farm-yard--while the lowing of the cattle in the distance would take the place of the Mock Turtle's heavy sobs.      Lastly, she pictured to herself how this same little sister of hers would, in the after-time, be herself a grown woman; and how she would keep, through all her riper years, the simple and loving heart of her childhood: and how she would gather about+ her other little children, and make THEIR eyes bright and eager with many a strange tale, perhaps even with the dream of Wonderland of long ago: and how she would feel with all their simple sorrows, and find a pleasure in all their simple joys, remembering her own child-life, and the happy summer days.                          THE END size of msg- 148362 totalsent- 148480 Client- 99 sent 148346 bytes, and made 1 requests  Created 100 clients Total requests sent: 100 Average time of getting response: 50.89639902114868 ms  15:06:43(-)root@datacomm-18:8005a2v2\$ </pre>		
4	Test more than 10 files is sent from epoll client to server and back	All files are sent from client to server and echoed back	Pass
	 <pre> Created 100 clients Total requests sent: 100 Average time of getting response: 50.89639902114868 ms  15:06:43(-)root@datacomm-18:8005a2v2\$ </pre>		
5	Check connection for epoll for maximum	Maximum number of connections should be around 4000+	Pass
	 <pre> 14:50:59(-)root@datacomm-18:8005a2v2\$ netstat -an   grep :7000   grep ESTABLISHED   wc -l 4000 14:50:59(-)root@datacomm-18:8005a2v2\$ </pre>		

1	Check to ensure that wrong server IP or port results in error	Error is shown when incorrect arguments are displayed	Passed
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14:07:22(-)root@datacomm-20:8005a2v2$ python3 select1.py 192.168.0.21 7000
Traceback (most recent call last):
  File "select1.py", line 45, in <module>
    sock.bind((SERVER_IP, PORT_NUMBER))
OSError: [Errno 99] Cannot assign requested address
```