Test	Input	Expected Output	Screenshot

Starting server With normal arguments	./assign2 server	Server starts running and waits for client
		Passed
			`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 server`
			`Use './assign2 [high|normal|low] 753664' to make a request to this server`
			`server>`

Starting server with invalid arguments	./assign2 serv	Server doesn't start and user gets usage prompt Passed	`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 serv` `Usage: ./assign2 [server|[high	normal	low] qid]` `benny@zaur[~/D/msg-queue-assign] (develop)$`
Starting high priority client with server running	./assign2 high [server pid]	Client starts Passed	`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 high 786432` `client>`
Starting normal priority client with server running	./assign2 normal [server qid]	Client starts Passed	`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 normal 786432` `client>`
Starting low priority client with server running	./assign2 low [server qid]	Client starts Passed	`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 low 786432` `client>`
Invalid priority	./assign2 asdf [bad server qid]	Client doesn't start and user gets usage prompt Passed	`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 asf 786432` `Usage: ./assign2 [server|[high	normal	low] qid]` `benny@zaur[~/D/msg-queue-assign] (develop)$`

Starting client without server	./assign2 high [garbage qid]	Client starts but cannot send
		Passed
			`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 normal 123123`
			`client> big.in`
			`Problem writing to the message queue: Invalid argument`
			`client>`

Enter a valid file	./assign2 normal [server qid] and then [filename]	Server responds with file Passed	(terminal output showing word list)

Entering invalid file	./assign2 normal [server qid] && [bad filename]	Server responds with error message
		Passed
			`benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 normal 884736`
			`client> asdf.txt`
			`client> Error: Could not open file`

Priority with multiple clients work	Starting 3 clients where low priority is started first, then normal then high	High finishes first, then normal, then low
		Passed
			`server> New request: [15646/1    big.in]`
			`15648> child started`
			`server> New request: [15643/4    big.in]`
			`15649> child started`
			`server> New request: [15593/16    big.in]`
			`15650> child started`
			`15650> child is finished and exiting`
			`15649> child is finished and exiting`
			`15648> child is finished and exiting`

Quitting the server half during sending does not crash	Start clients and then typing "quit" on server	The clients exit, no zombie processes, clean message queues	`benny@zaur[~/D/msg-queue-assign] (master)$ ipcs`
			`------ Message Queues --------`
			`key        msqid      owner      perms      used-bytes   messages`

| clients and not zombies are left | | Passed | ```
benny@zaur[~/D/msg-queue-assign] (master)$ ps -aux | grep assign2
benny       7605  0.0  0.0  12104  2240 pts/4    S+   20:45   0:00 grep --color=auto assign2
``` **See SS1 Below** |
| Quitting the client | Start client and then type "quit" | Client exits Passed | ```
benny@zaur[~/D/msg-queue-assign] (develop)$ ./assign2 normal 884736
client> quit
benny@zaur[~/D/msg-queue-assign] (develop)$ 
``` |

SS1