

a) Discuss and evaluate what happens when you're running both in separate windows and you kill one or the other. Kirk writes messages to a message queue and spock reads messages from the same queue. If one of the programs is killed the other program will continue running and the message queue will persist. For example, if kirk is killed while running, spock will continue to read from the message queue until it is also terminated. If spock is killed, kirk will continue to write messages to the message queue until it is also terminated.

b) Discuss what happens (and why) when you run two copies of kirk.

If two copies of kirk are run, two separate message queues will be created with different message queue IDs, even though they have the same key. Each instance will write to its own message queue, and spock can be used to read messages of each queue because it can change the ID it reads from.

c) Discuss what happens (and why) when you run two copies of spock.

If two copies of spock are run, both will attempt to read messages from the same message queue with the same ID. Since both processes, however, are running independently, there is no guarantee which process will read a given message from the queue. It's possible that one process may read all the messages, while the other doesn't read any.