1. What types of semaphores exist, and how do they differ?

2. What is the difference between a binary semaphore and a pthread mutex?

3. Give an example where a counting semaphore would be useful.

4. When using shared memory, what flag must be passed to `mmap()`?

5. What is the process for mounting a shared memory object?

6. What is a socket?

7. What is the difference between a stream socket and a datagram socket?

8. What are 2 methods of I/O multiplexing?