# COMP 7500/7506 - Lecture 09a: Project 2-4 pWordCount File I/O

**🟊: >85%, 🟊🟊: 70-85%, 🟊🟊🟊: 55-70%, 🟊🟊🟊🟊: 40-55%, 🟊🟊🟊🟊🟊: < 40%**

**🟊 Status Report (Menti):** What’s your project progress?

1. I completed the “Beginner” level. I am developing an advanced version (e.g., ”normal” or “nightmare”).
2. I completed the “Beginner” level. I will submit this version.
3. I have started the “Beginner” version.
4. I haven’t started the project yet.

**🟊🟊 Exercise 1.1:** Read the following source code. What does #define DEBUG do in the first line? (15 Seconds)



**🟊🟊 Exercise 1.2:** What does atoi()do? (15 Seconds)

# COMP 7500/7506 - Lecture 09b: IPC in the Mach Operating System

**🟊 Exercise 2 (Review):** What are addr, flags, and offset in the mmap() function? (15 Seconds)

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**🟊🟊 Exercise 3**: What are the problems with IPC mechanisms using shared files?

**🟊🟊 Exercise 4**: How to deal with special cases where a mailbox is full (**Hint:** design a policy)?

**Answer:**

* Wait indefinitely
* Wait at most n milliseconds
* Return immediately
* Temporarily cache a message

**Review Exercises**

**🟊 Review Exercise 1 (Menti):** In the Mach operating system**,** communications among multiple processes are *not* carried out by

1. ports
2. mailboxes
3. shared memory
4. messages

**🟊 Review Exercise 2:** What are the three system calls for message transfer in the Mach operating system?