

Homework 12

Problem 1:

Please describe what will happen with memory mapping in below situations:

- 1) write to a shared object which has been shared by multiple processes;
- 2) write to a private copy-on-write object which has been mapped to multiple processes;
- 3) `fork()` is called in a process;
- 4) `exec()` is called in a process.

Problem 2:

Given an input file `hello.txt` that consists of the string "Hello, world!\n", write a C program that uses ***mmap*** to change the contents of `hello.txt` to "Jello, world!\n". The name of the input file should be passed as a command line argument.

Problem 3:

Write a C program ***mmapcopy.c*** that uses ***mmap*** to copy an arbitrary-sized disk file to ***stdout***. The name of the input file should be passed as a command line argument.