PROGRAM 3

Can P2 write into the file abc using fp?

When the child process writes to the file using the file pointer `fp`, it can write to the same file as the parent process, because the file pointer `fp` is copied during the `fork()` system call. However, each process has its own file pointer, which means they keep their own position in the file, and they will not affect each other when they write on the file.

If P2 can write into abc then at which position in the file abc will it write?

When P2 writes to the file using fp, it will write to the current position in the file. If P1 had previously written to the file, P2 will continue writing at the position where P1 left off.

If P1 and P2 both attempt into the file abc then what will be written in the file?

f P1 and P2 both write to the file simultaneously, the order in which their writes occur will be determined by the scheduling of the operating system. Depending on the specific implementation, it is possible that the writes will be interleaved in an unpredictable way, with each process writing a few bytes before being interrupted by the other.

If P1 closes the file (fclose()) does it get closed for P2 as well?

If P1 closes the file using fclose(), the file will be closed for P1, but it will remain open for P2. The child process P2 will still have the file descriptor for the file, so it can continue to write to it.