

## 2021510010 - Çağrı AYDIN – Lab 7

```
Welcome to fish, the friendly interactive shell
Type help for instructions on how to use fish
[13:48:06] deuceng@debian /home/deuceng/Desktop
> gcc aio_read_write.c -o aio_read_write_out
[13:48:37] deuceng@debian /home/deuceng/Desktop
> ./aio_read_write_out
okan
Reading is finished
okan
Writing is finished
[13:48:44] deuceng@debian /home/deuceng/Desktop
> gcc multiprocess_aio.c -o multiprocess_aio_out
multiprocess_aio.c: In function 'main':
multiprocess_aio.c:88:19: warning: implicit declaration of function 'wait' [-Wimplicit-function-declaration]
   88 |         pidwait = wait(&child_status); // wait for a child process to stop or terminate
      |
[13:49:19] deuceng@debian /home/deuceng/Desktop
> ./multiprocess_aio_out
Error at aio_return()

fatih
Writing is finished
[13:49:29] deuceng@debian /home/deuceng/Desktop
> 
```

As part of this task, it is required to compile, run, and evaluate the outputs of `aio_read_write.c` and `multiprocess_aio.c`. The `aio_read_write.c` file showcases asynchronous file read and write operations, effectively demonstrating their successful execution. Conversely, the `multiprocess_aio.c` file explores asynchronous I/O within a multi-process environment. Unfortunately, the lack of a proper implementation for the `wait()` function results in warnings, and an error occurs during the execution of the `aio_return()` function. These results underscore both the performance benefits of asynchronous I/O and the potential challenges or errors that can arise from incomplete or incorrect setups.