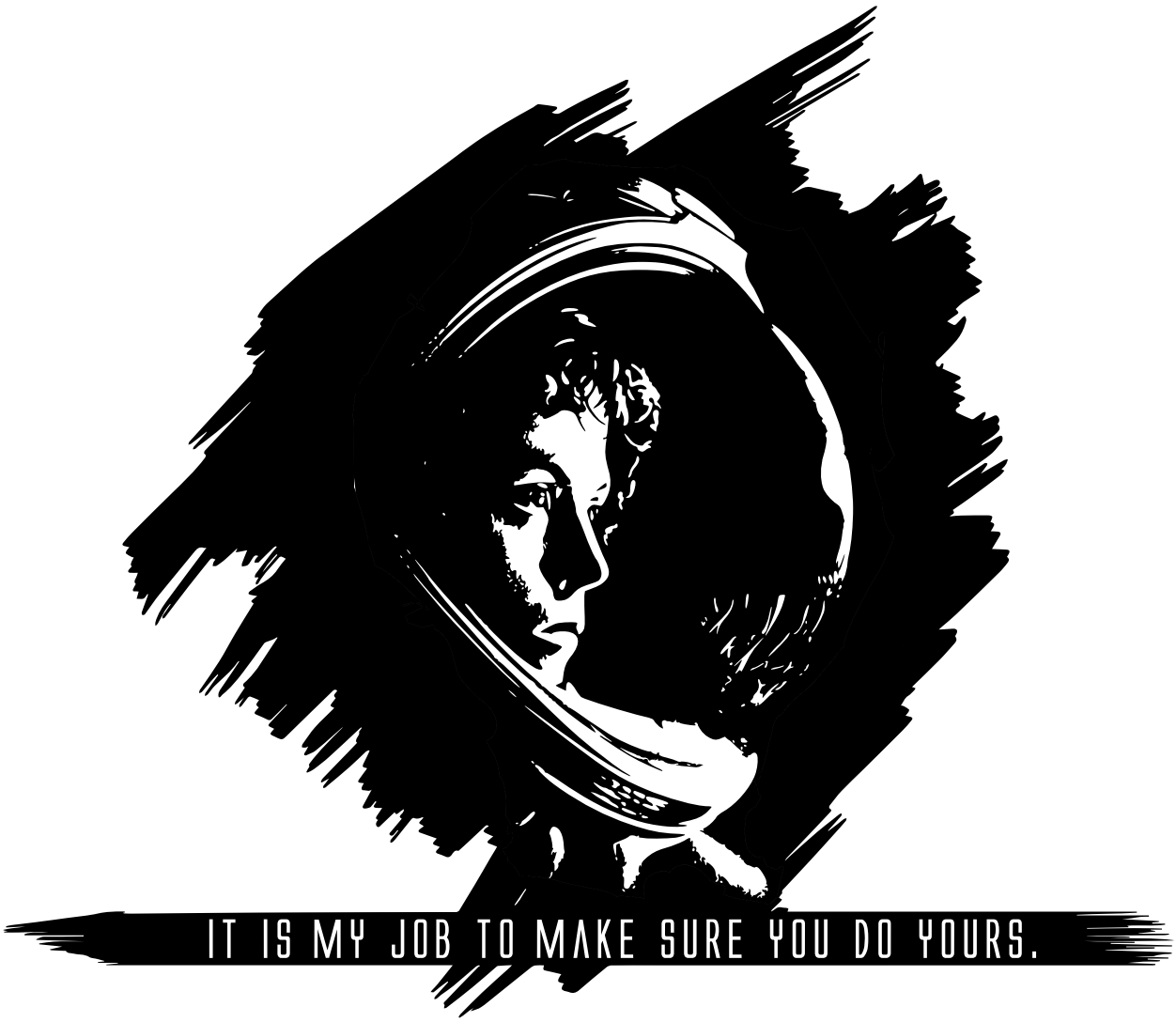
Exercises — Fibo iter

version #



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Contents

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1 Fibo iter

Files to submit:

- fibo_iter/fibo_iter.c

Main function: none

Authorized headers: You are only allowed to use the functions defined in the following headers:

- err.h
- stddef.h
- errno.h
- assert.h

1.1 Goal

Write the function that computes the *Fibonacci sequence*. But since the recursive implementation of this function is very slow, we want to have a more optimized version that uses loops and does not recompute every previous value every time.

Reminder: The Fibonacci sequence is defined by U_n as follow:

- $U_0 = 0$
- $U_1 = 1$
- $U_n = U_{n-1} + U_{n-2}$

```
unsigned long fibo_iter(unsigned long n)
```

It is my job to make sure you do yours.