

Operating-system homework#3

Programming problems

Kernel: 6.8.1-arch1-1

gcc (GCC) 13.2.1

compile

```
wj461 | ▶~/code/os/HW3/code | ▶main ± > make
gcc -c -o fibonacci.o fibonacci.c
gcc -c -o mutex_biridge.o mutex_biridge.c
gcc -c -o virtual_address.o virtual_address.c
gcc -o ./build/fibonacci.exe fibonacci.c
gcc -o ./build/mutex_biridge.exe mutex_biridge.c
gcc -o ./build/virtual_address.exe virtual_address.c
```

7.15

```
wj461 | ▶~/code/os/HW3/code | ▶main ± > ./build/fibonacci.exe 20
Fibonacci series: 20
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181
```

8.32

```
wj461 | ▶~/code/os/HW3/code | ▶main ± > ./build/mutex_biridge.exe
north_runner
north_runner
north_runner
north_runner
north_runner
north_runner
north_runner
north_runner
north_runner
north_runner
south_runner
south_runner
```

9.28

```
wj461 | ▶~/code/os/HW3/code | ▶main ± > ./build/virtual_address.exe 21000
The address 21000 contains:
page number = 5, offset = 520
```