

2023 Fall ECE 344: Operating Systems

Lecture 23

1.0.1

Parallelization Example

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We're Running a Bank Doing 10,000,000 Transfers

We have a simulation that can create varying number of accounts

Each account has a unique ID, and a balance (starting with \$1 000)

We generate transfers between random accounts for 10% of their current balance

They must call `securely_connect_to_bank` before starting the transfer

Coding Example

Done live! We'll have data races and deadlocks

Our goal is to be faster than 11 seconds

You can find the template in the examples repository

To compile it, run the following commands:

```
cd lectures/23-parallelization-example # if not already there
meson setup build
meson compile -C build
```

Run the program using: `./banksim <num_accounts>`