ECE 344: Operating Systems

Lecture 17

Parallelization Example

1.0.2

Jon Eyolfson

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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 `lecture-17` in the `examples` repository

To compile it, run the following commands:

```
cd lecture-17 # if not already there
mkdir build
cd build
cmake ..
cmake --build . # or make
```

Run the program using: ./banksim <num_accounts>