

# ECE8930 Introduction to Blockchain Technology

## Programming Project 2

Biyang Fu

[biyangf@clemson.edu](mailto:biyangf@clemson.edu)

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Compile and run:

```
g++ Programming2.cpp -o Programming2
./Programming2
```

Results:

```
fubiyang — Programming2 — 127x45
Last login: Wed Jul 29 03:41:05 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
fby:~ fubiyang$ /Users/fubiyang/Desktop/Blockchain/Assignment/ProgrammingAssignment2/Programming2 ; exit;
Round 1: the IDs of the validators who finalized this checkpoint is 1 2 3 6 8 9 The total deposits is: 1600
Round 2: the IDs of the validators who finalized this checkpoint is 2 3 5 6 8 The total deposits is: 1850
Round 3: the IDs of the validators who finalized this checkpoint is 1 2 3 6 7 8 The total deposits is: 1800
Round 4: the IDs of the validators who finalized this checkpoint is 0 1 3 4 6 7 8 9 The total deposits is: 2300
Round 5: the IDs of the validators who finalized this checkpoint is 0 2 4 6 8 The total deposits is: 1750
Round 6: the IDs of the validators who finalized this checkpoint is 0 2 3 5 7 8 9 The total deposits is: 2250
Round 7: the IDs of the validators who finalized this checkpoint is 2 3 4 6 7 8 9 The total deposits is: 2000
Round 8: the IDs of the validators who finalized this checkpoint is 1 2 3 4 5 6 8 The total deposits is: 2100
Round 9: the IDs of the validators who finalized this checkpoint is 0 5 6 The total deposits is: 1600
Round 10: the IDs of the validators who finalized this checkpoint is 0 1 4 5 6 9 The total deposits is: 2000
The blockchain is 0 -> 1 -> 4 -> 10 -> 22 -> 45 -> 91 -> 184 -> 370 -> 742 -> 1485 -> logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]
```

Example 1

```
fubiyang — Programming2 — 131x50
Last login: Wed Jul 29 03:57:51 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
fby:~ fubiyang$ /Users/fubiyang/Desktop/Blockchain/Assignment/ProgrammingAssignment2/Programming2 ; exit;
Round 1: the IDs of the validators who finalized this checkpoint is 4 5 6 7 8 9 The total deposits is: 1950
Round 2: the IDs of the validators who finalized this checkpoint is 0 1 2 4 6 7 8 The total deposits is: 2200
Round 3: the IDs of the validators who finalized this checkpoint is 0 2 3 6 7 The total deposits is: 2000
Round 4: the IDs of the validators who finalized this checkpoint is 0 2 4 5 8 The total deposits is: 1650
Round 5: the IDs of the validators who finalized this checkpoint is 2 5 6 7 8 9 The total deposits is: 2100
Round 6: the IDs of the validators who finalized this checkpoint is 0 4 5 6 The total deposits is: 1750
Round 7: the IDs of the validators who finalized this checkpoint is 0 1 6 7 8 9 The total deposits is: 1900
Round 8: the IDs of the validators who finalized this checkpoint is 2 3 4 6 7 The total deposits is: 1650
Round 9: the IDs of the validators who finalized this checkpoint is 0 3 5 7 8 9 The total deposits is: 1950
Round 10: the IDs of the validators who finalized this checkpoint is 0 5 6 The total deposits is: 1600
The blockchain is 0 -> 1 -> 3 -> 7 -> 15 -> 31 -> 63 -> 128 -> 257 -> 515 -> 1032 -> logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]
```

Example 2

```
fubiyang — Programming2 — 131x46
Last login: Wed Jul 29 04:00:04 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
fby:~ fubiyang$ /Users/fubiyang/Desktop/Blockchain/Assignment/ProgrammingAssignment2/Programming2 ; exit;
Round 1: the IDs of the validators who finalized this checkpoint is 0 1 2 3 7 8 9 The total deposits is: 1850
Round 2: the IDs of the validators who finalized this checkpoint is 1 4 5 6 7 8 The total deposits is: 1900
Round 3: the IDs of the validators who finalized this checkpoint is 1 2 3 6 7 8 9 The total deposits is: 1950
Round 4: the IDs of the validators who finalized this checkpoint is 0 5 6 8 The total deposits is: 1800
Round 5: the IDs of the validators who finalized this checkpoint is 3 4 5 6 9 The total deposits is: 1650
Round 6: the IDs of the validators who finalized this checkpoint is 3 4 5 6 7 8 9 The total deposits is: 2200
Round 7: the IDs of the validators who finalized this checkpoint is 0 1 3 4 5 6 8 9 The total deposits is: 2450
Round 8: the IDs of the validators who finalized this checkpoint is 0 1 4 5 6 7 The total deposits is: 2200
Round 9: the IDs of the validators who finalized this checkpoint is 0 2 5 6 7 8 9 The total deposits is: 2600
Round 10: the IDs of the validators who finalized this checkpoint is 0 1 2 3 4 5 6 7 8 9 The total deposits is: 3100
The blockchain is 0 -> 2 -> 5 -> 12 -> 26 -> 54 -> 110 -> 221 -> 443 -> 888 -> 1777 -> logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]
```

Example 3