

Midterm Project Part2 Report

1. In our experiment, difficulties are set to 6, 8, 12, 16, 24. They are the number of leading zero bits. We count the generated blocks in a certain amount of time to measure the mining rate. For easy difficulty (6-16), the experiment lasted 2 minutes. For hard difficulty (24), the experiment lasted 20 minutes. And during the experiment, the lambda variable was set to 0.

Difficulty(number of leading zero bits)	6	8	12	16	24
Mining Rate (block/sec)	1042.24	561.13	51.25	5.37	0.021

3. Result

As shown by the above table, the mining rate drops with increasing difficulty expectedly.

4. Assignment

We talked about the solution, implemented the code together and did the experiment together.