

# COP 5615

## Project – I

### Group Members:

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1. Based on our implementation, the best performance is observed when the work unit is assigned to the worker at once in the beginning i.e., the work unit each worker gets is (overall work unit) / (number of workers).

In our implementation:

Overall work unit: 10,000,000

Number of workers: 4

Size of work unit for each actor: 2,500,000

2. UF ID used was “vbhaskar”

ramakrishna@Raki:~/Desktop/DOS/project1\$ time sbt "run 4"

[info] Set current project to BitcoinMiner (in build file:/home/ramakrishna/Desktop/DOS/project1/)

[info] Compiling 1 Scala source to /home/ramakrishna/Desktop/DOS/project1/target/scala-2.10/classes...

[info] Running Test 4

[INFO] [09/19/2014 21:18:41.978] [run-main-0]

[NettyRemoteTransport(akka://MasterMiningSystem@127.0.1.1:2552)]

RemoteServerStarted@akka://MasterMiningSystem@127.0.1.1:2552

vbhaskarcX;28Go,. 0000be88f07bcb4560af22789484a525aab8cc8bdda55382575df686a9d1f6b7

vbhaskar[NQ3]`jQUEu 0000887a6c439ada80384a97f9ef61207b0011af7a8f355eb4ad92d5e005bc

vbhaskarl>3<}l|ZD 0000fc93047defb012a23245e78e06a86b72f833a90df32738c09a190660cb4d

vbhaskar@piV 00002a90fc0075edc0d15ba385095e08c6a59cc41e406bf14990f7fb054d2e3d

vbhaskar,%!|p\_wh6] 0000fa1d1ac85da80560a89655d901e586605c66bfa6a44f647f1f801a2b3d3b

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Number of bitcoins: 115

Calculation time: 34701 milliseconds

Shutting down master...

[success] Total time: 43 s, completed Sep 19, 2014 9:19:16 PM

real 0m45.878s

user 2m31.941s

sys 0m1.106s

3. Real Time = 37.874s

CPU Time = 134.524

Ratio(CPU Time/Real time)= 3.551

CPU and Real time values were clocked when input was 5 and the number of workers was 4

4. Coin - rakibits37336849-def6-435a-9e99-5725b3692313

Zeros - 7

5. Maximum Connected Systems – Three