

# PROJECT REPORT

## Group Members:

1. Shivaditya Jatar - UF ID: 6203 9241
2. Ayush Mittal - UF ID: 3777 8171

## We are showing the following items in output:

1. Bitcoins Mined along with total bitcoins mined
2. Transaction Information (Transaction id, Sender Address, Receiver Address, Timestamp, Status, Amount)
3. Wallets information of Participants

## For Printing Purposes:

Transaction ID: Starting 8 characters printed

Public Key: Starting 6 characters printed

*Here are some screenshots of running program.*

## Screenshots

**\*\* Bitcoins printed:**

```
C:\ Select Command Prompt
Y:\#STUDY\UFL\Fall 18\Distributed OS\project4_1>epmd -daemon

Y:\#STUDY\UFL\Fall 18\Distributed OS\project4_1>escript project4_1 4
bitcoin;ayushiva2DdhHJc0fF6491 000083f3385223f6b702a29633e9208252d8d02d03ce007ca0557c13c385b428
bitcoin;ayushivazYN8cymJMB2238 0000aad27729bfa46b1aa718cd2227d51a15014a3570a77d80733dade71468fa
bitcoin;ayushivaEuBTtTnG3Y6952 0000049c0ff86b46083ac2648c700ce39e1e79b1907b0b2606c850eeab4a58a5
bitcoin;ayushivaEuBTtTnG3Y12567 0000d1f651e3222e550f3d62c157fe1bee8e091ab927f71adfce568019253d1d
bitcoin;ayushivaU6xmCDbYkE42911 0000c96df76125e86e4c86c2b7506cd82706acbca3e1ceaff9b62e0a19ab46c6
bitcoin;ayushivaaw8hwGANZq7628 00004cb183b83c92020eab65349537f9e5e5271d5a6c1f34890c6322544e0b3e
bitcoin;ayushivaaw8hwGANZq24120 0000c01f20eea1b1c4128b4ac370452aeb7f1b3801282218a6d2f687bbc21476
bitcoin;ayushivawgS2MmbJwk19501 00002915e4503b7efc81cbbdf0837bdaeae9bc7345a34ae10e5d71e2dbb3459d
bitcoin;ayushivawgS2MmbJwk40171 00007ac58c21df84ec787941bb090919ea31a36ab48cfdadfd03f4874a7cdf
bitcoin;ayushivaA0xwhntX0Y6027 00007cb4b0d985f37fe3d1617a868f7eb6465269c44e5c7b3bab2a6dd0d13dc
bitcoin;ayushivaA0xwhntX0Y7983 00001a91fd8209778fe413f2c6cfc2ec2533cc53d445ea0749f929a47dd523a2
bitcoin;ayushivaXcBD8wReGq15693 000078c8bb2eeaf9c6362db81e1dfcbd343e620c303a99bb6fd898a2e85ee4f5
bitcoin;ayushivaXcBD8wReGq24644 00004b2c3a611d66d7a85383b0dea27c84485f08c7979a2ecc1f46de228a4b28
bitcoin;ayushivaTWsJkx5Xzv23195 00007ea53ff7ce6ba3dbf6b368e6526cec59f305569e191c48e8426b906bc913
bitcoin;ayushiva9Bmy9tXQH88121 00002f5d654416a7e51748eb37be87bab92db63cf992c1e484ca73810b5abd8e
bitcoin;ayushivaqC3GyxWIYy11254 000018be95482f1c2b0ba4cfb18fbc54080281cf6b5a6c1715f08d9eb8e1ed72
```

## **\*\* Transactions Performed:**

```
C:\ Select Command Prompt
bitcoin;ayushivamkIAH9jne92539 00008f33482ba8f4d9a6a132980e3f8d80070dfe804fbac69f1ee4a7e1f903bf
bitcoin;ayushivamkIAH9jne937805 000077b357fb9334c370343b839172e7261d1d332bb618531b33825f3558a4a5
bitcoin;ayushivamkIAH9jne939292 00004ee34ebf81387c3eb29e64312a751aa25e24a61469f97529fb6988bedb64
Maximum number of threads reached!
Total Bitcoins Mined: 65

*****
-----Transactions Information-----
*****

Transaction id | Sender Addr. | Receiver Addr. | Time | Status | Amount
DpP0w3XX      | 046472      | 04DF37      | 2018-11-26 19:10:06.383000Z | Success | 2 BTC
JZvB0fiV      | 04EBF4      | 046472      | 2018-11-26 19:10:06.919000Z | Success | 4 BTC
NHFwWzaz      | 04EBF4      | 04F51A      | 2018-11-26 19:10:07.429000Z | Unconfirmed | 5 BTC
RB00C67n      | 0469B4      | 04EBF4      | 2018-11-26 19:10:07.937000Z | Unconfirmed | 12 BTC
ScsWHL4g      | 04DF37      | 04F51A      | 2018-11-26 19:10:08.450000Z | Success | 2 BTC
```

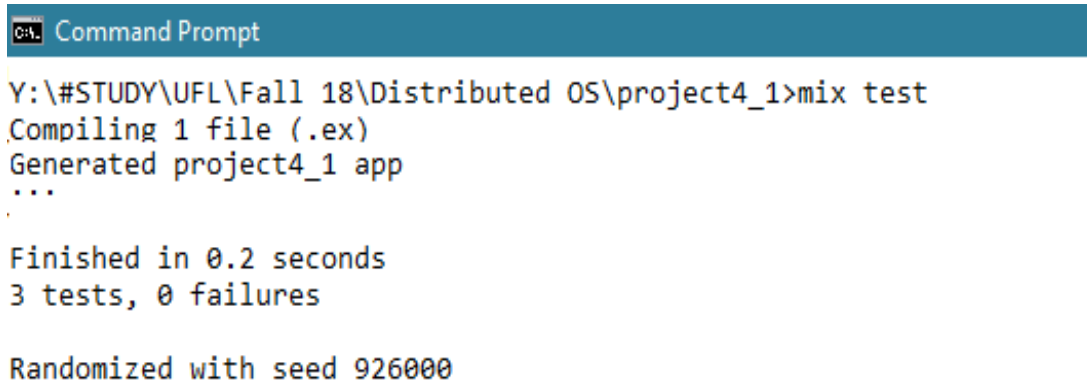
## **\*\* Wallets**

```
C:\ Command Prompt
RB00C67n      0469B4      04EBF4      2018-11-26 19:10:07.937000Z | Unconfirmed | 12 BTC
ScsWHL4g      04DF37      04F51A      2018-11-26 19:10:08.450000Z | Success | 2 BTC

*****
-----WALLETS-----
*****

-----
Wallet: 04F51A
No transactions for this wallet
-----
Balance: 10 BTC
*****
Wallet: 0469B4
No transactions for this wallet
-----
Balance: 9 BTC
*****
Wallet: 046472
Transaction:1
Receiver: 04DF37
Amount: 2
Status: Success
-----
Balance: 10 BTC
*****
Wallet: 0444C5
No transactions for this wallet
-----
Balance: 8 BTC
*****
```

## Screenshot (Testing)



```
C:\> Command Prompt

Y:\#STUDY\UFL\Fall 18\Distributed OS\project4_1>mix test
Compiling 1 file (.ex)
Generated project4_1 app
...

Finished in 0.2 seconds
3 tests, 0 failures

Randomized with seed 926000
```