Assignment 1

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Set-up process:

I have followed the documentation available at https://docs.komodoplatform.com/basic-docs/smart-chains/smart-chain-setup/installing-from-source.html#macos . Set up process went smoothly and all related files were appropriately created and changes were made in Komodo.conf as instructed in the installation pdf that was provided.

Starting up:

```
[harrishmurugesan@MacBook-Pro src % ./komodod -ac_name=NEW_1 -ac_supply=1000 -addnode=172.20.10.3
ASSETCHAINS_SUPPLY 1000
MAX_MONEY 106320417438 1063.20417438
chainparams_commandline called
>>>>>>>>>> NEW_1: p2p.8708 rpc.8709 magic.c2778fe5 3262615525 1000 coins
call komodo_args.(./komodod) NOTARY_PUBKEY.()
initialized NEW_1 at 1600218869
nMaxConnections 384
finished loading blocks NEW_1
fAddressIndex.0/0 fSpentIndex.0/0
height.0 slowflag.1 possible.1 cmp.0
nLocalServices 40000005 0, 0
```

```
                                    ./komodod -ac_name=NEW_1 -ac_supply=1000 -addnode=172.20.10.2
ASSETCHAINS_SUPPLY 1000
MAX_MONEY 106320417438 1063.20417438
chainparams_commandline called
>>>>>>>>>> NEW_1: p2p.8708 rpc.8709 magic.c2778fe5 3262615525 1000 coins
call komodo_args.(./komodod) NOTARY_PUBKEY.()
initialized NEW_1 at 1600219766
nMaxConnections 384
set sapling height, if possible from ht.58 1600219605
NEW_1 transition at 1 (0, 1231006505) -> (1, 1600219394)
SET SAPLING ACTIVATION height.61
NEW_1 sapling activation at 61
finished loading blocks NEW_1
```

I have created an asset chain with the name of NEW_1 with 1000 coins and connected it to another laptop. Both laptops were connected to the my phone's hotspot. IP address of machine number 1 is 172.20.10.2 and the IP address off machine number 2 is 172.20.10.3.

Mining:

```
[harrishmurugesan@MacBook-Pro src % ./komodo-cli -ac_name=NEW_1 getwalletinfo
{
  "walletversion": 60000,
  "balance": 0.00000000,
  "unconfirmed_balance": 0.00000000,
  "immature_balance": 0.00000000,
  "txcount": 0,
  "keypoololdest": 1600218870,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "1f6fd00116659060a1077a72d50dcde00dec2ae1d933090743e61ab5d2a51442"
}
[harrishmurugesan@MacBook-Pro src % ./komodo-cli -ac_name=NEW_1 setgenerate true $(nproc)
[harrishmurugesan@MacBook-Pro src % ./komodo-cli -ac_name=NEW_1 getwalletinfo
{
  "walletversion": 60000,
  "balance": 0.00000000,
  "unconfirmed_balance": 0.00000000,
  "immature_balance": 0.00000000,
  "txcount": 0,
  "keypoololdest": 1600218870,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "1f6fd00116659060a1077a72d50dcde00dec2ae1d933090743e61ab5d2a51442"
}
[harrishmurugesan@MacBook-Pro src % ./komodo-cli -ac_name=NEW_1 getwalletinfo
{
  "walletversion": 60000,
  "balance": 1000.08495621,
  "unconfirmed_balance": 0.00000000,
  "immature_balance": 0.00000000,
  "txcount": 67,
  "keypoololdest": 1600218872,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "1f6fd00116659060a1077a72d50dcde00dec2ae1d933090743e61ab5d2a51442"
}
```

```
                                    ./komodo-cli -ac_name=NEW_1 getwalletinfo

  "walletversion": 60000,
  "balance": 0.00000000,
  "unconfirmed_balance": 0.00000000,
  "immature_balance": 0.00000000,
  "txcount": 0,
  "keypoololdest": 1600219378,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "9669645f02b630016f77b0eb1f67974d273a30cfd547e490cd18cd6668636269"
}
```

      1000 coins have been mined and added to my wallet balance in machine 1. Machine 2 is still empty.

Sending coins:

```
                                ./komodo-cli -ac_name=NEW_1 getnewaddress
RHuJgSy87uzyC4THJ5rbKXUgEW8ARTuPPx
```

```
[harrishmurugesan@MacBook-Pro src % ./komodo-cli -ac_name=NEW_1 sendtoaddress RHuJgSy87uzyC4THJ5rbKXUgEW8ARTuPPx 100
e7a05914e0d6a7f8ff422b87d6c54718aa0740af03d34fc261dbc2d5a45a38d7
[harrishmurugesan@MacBook-Pro src % ./komodo-cli -ac_name=NEW_1 getwalletinfo
{
  "walletversion": 60000,
  "balance": 900.08835621,
  "unconfirmed_balance": 0.00000000,
  "immature_balance": 0.00000000,
  "txcount": 102,
  "keypoololdest": 1600219402,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "1f6fd00116659060a1077a72d50dcde00dec2ae1d933090743e61ab5d2a51442"
}
```

```
                                          ./komodo-cli -ac_name=NEW_1 getwalletinfo                           ]
{
  "walletversion": 60000,
  "balance": 0.00000000,
  "unconfirmed_balance": 100.00000000,
  "immature_balance": 0.00000000,
  "txcount": 1,
  "keypoololdest": 1600219378,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "9669645f02b630016f77b0eb1f67974d273a30cfd547e490cd18cd6668636269"
}
```

I am sending 100 coins from machine 1 to machine 2 after obtaining the machine 2's address my executing the command `./komodo-cli -ac_name=NEW_1 getnewaddress`.

```
                                          ./komodo-cli -ac_name=NEW_1 setgenerate true $(nproc)              ]
                                          ./komodo-cli -ac_name=NEW_1 getwalletinfo                           ]
{
  "walletversion": 60000,
  "balance": 100.00010000,
  "unconfirmed_balance": 0.00000000,
  "immature_balance": 0.00000000,
  "txcount": 2,
  "keypoololdest": 1600219378,
  "keypoolsize": 101,
  "paytxfee": 0.00000000,
  "seedfp": "9669645f02b630016f77b0eb1f67974d273a30cfd547e490cd18cd6668636269"
}
```

I have received it on the second machine and added it to the balance of that wallet. Transaction is complete between the two.