LAB_3 BLOCKCHAIN AND CRYPTOCURRENCIES

E18CSE206

VIBHAV SHARMA

Task 1:

Import one of the Go-Ethereum accounts into MetaMask and perform some transactions.


```
Microsoft Windows [Version 10.0.19042.804]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\Acer>geth attach ipc:\\.\pipe\geth.ipc
Welcome to the Geth JavaScript console!

instance: Geth/v1.9.25-stable-e7872729/windows-amd64/go1.15.6
at block: 0 (Thu Jan 01 1970 05:30:00 GMT+0530 (IST))
 datadir: C:\Users\Acer\Desktop\Semester 6\Blockchain and Cryptography\Private_chain\chaindata\init\genesis.json
 modules: admin:1.0 debug:1.0 eth:1.0 ethash:1.0 miner:1.0 net:1.0 personal:1.0 rpc:1.0 txpool:1.0 web3:1.0

To exit, press ctrl-d
> admin.nodeInfo
{
  enode: "enode://681f34eb14e05ca09c17855784b8a41d8be30d14087299d1fa38718ec8b49aa210db66c926def87145c4c704f0c4389f5cb64fdbb11ae89b69c6870756de6f91@106.214.61.221:3C
  enr: "enr:-Jg4QMRQ6GIAw327YBYvaqyyGaLEDf8DAeKq2OH_Lft8Y7LuY6bedXLrIQnB7J9pHUHKKxFA8jQUoSl-WQqxAZClOHYCg2V0aMrJhPxk7ASDEYwwgmlkgnYOgmlwhGrWPd2Jc2VjcDI1NmsxoQNoHzTr
hVeEuKQdi-MNFAhymdH6OHGOyLSaooNOY3CCd1-DdWRwgnZf",
  id: "ed639e942ad8841b36fa8adb0Of0f3ff2462d3bed5891af5f3c0c8efe35bdecb",
  ip: "106.214.61.221",
  listenAddr: "[::]:30303",
  name: "Geth/v1.9.25-stable-e7872729/windows-amd64/go1.15.6",
  ports: {
    discovery: 30303,
    listener: 30303
  },
  protocols: {
    eth: {
      config: {
        byzantiumBlock: 4370000,
        chainId: 1,
        constantinopleBlock: 7280000,
        daoForkBlock: 1920000,
        daoForkSupport: true,
        eip150Block: 2463000,
        eip150Hash: "0x2086799aeebeae135c246c65021c82b4e15a2c451340993aacfd2751886514f0",
        eip155Block: 2675000,
        eip158Block: 2675000,
        ethash: {},
        homesteadBlock: 1150000,
        istanbulBlock: 9069000,
        muirGlacierBlock: 9200000,
        petersburgBlock: 7280000
      },
      difficulty: 17179869184,
      genesis: "0xd4e56740f876aef8c010b86a40d5f56745a118d0906a34e69aec8c0db1cb8fa3",
      head: "0xd4e56740f876aef8c010b86a40d5f56745a118d0906a34e69aec8c0db1cb8fa3",
      network: 1
    }
  }
}
> personal.newAccount()
Passphrase:
Repeat passphrase:
"0xaf657f6208ef37ac95ef195dc69845e42004c8fc"
> eth.accounts
```
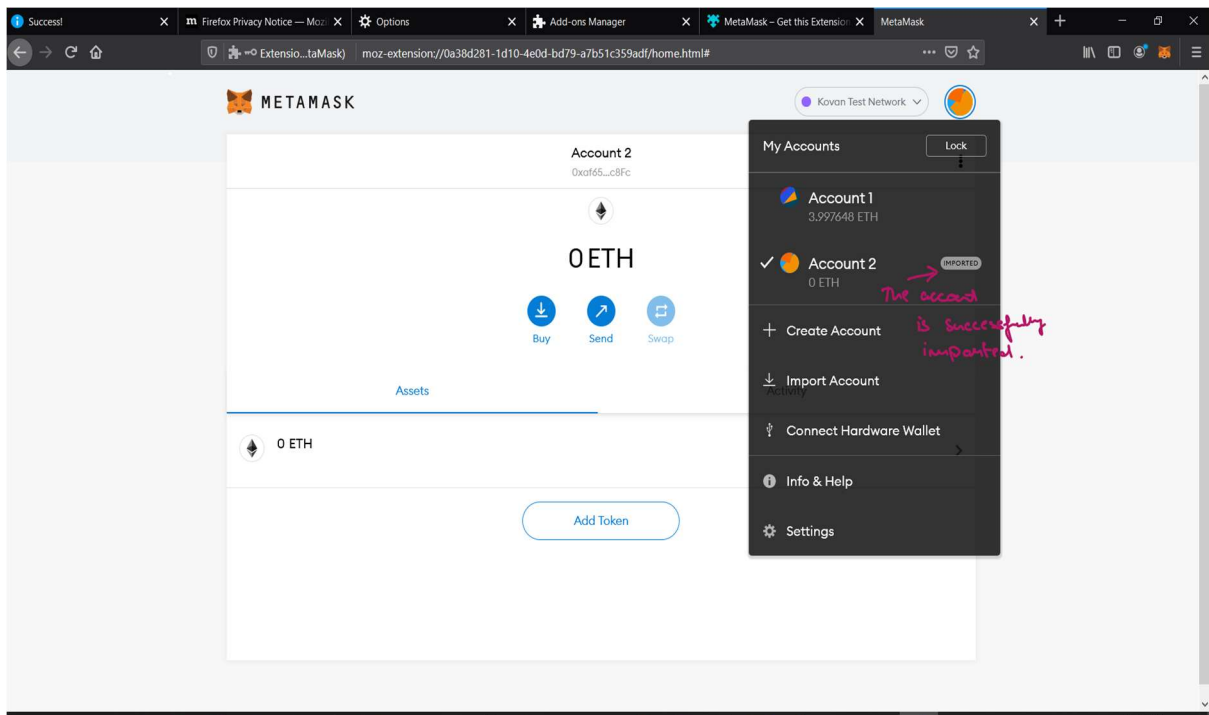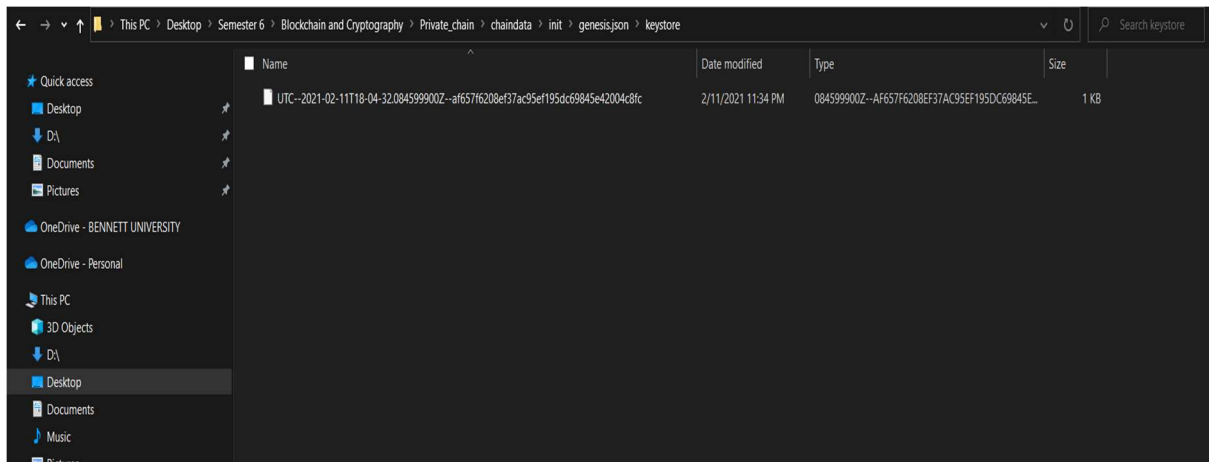
Admin Node Info. (handwritten annotation)


```
> personal.newAccount()   → Creation of New Account.
Passphrase:
Repeat passphrase:
"0xaf657f6208ef37ac95ef195dc69845e42004c8fc"
> eth.accounts
["0xaf657f6208ef37ac95ef195dc69845e42004c8fc"]
> miner.start()
null
> miner.stop()
null
>
> web3.fromWei(eth.getBalance(eth.coinbase),"ether")   ]- Current Balance
0
 Exception 0xc0000005 0x1 0xc000a298b4 0x7ffb5e6a9d15
>
```

The account is successfully imported.

Task 2 :

Write and compile a contract using Remix IDE and Deploy into the private Blockchain (Geth).