Creating the network

```
(base) C:\Users\basha\Python_CodingDojo\EthureumNetwork>geth --datadir ./node1 account new 'geth' is not recognized as an internal or external command,
operable program or batch file.
(base) C:\Users\basha\Python_CodingDojo\EthureumNetwork>geth --datadir ./node1 account new
'geth' is not recognized as an internal or external command,
 perable program or batch file.
(base) C:\Users\basha\Python_CodingDojo\EthureumNetwork>geth --datadir ./node1 account new INFO [12-16|10:02:31.695] Maximum peer count ETH=50 LES=0 total=50 Your new account is locked with a password. Please give a password. Do not forget this password.
Password:
Repeat password:
Your new key was generated
Public address of the key: 0x310214998941B6Fe90829033978407293b1457cE
Path of the secret key file: node1\keystore\UTC--2021-12-16T07-02-40.448712200Z--310214998941b6fe90829033978407293b1457ce
  You can share your public address with anyone. Others need it to interact with you.
  You must NEVER share the secret key with anyone! The key controls access to your funds!
  You must BACKUP your key file! Without the key, it's impossible to access account funds!
  You must REMEMBER your password! Without the password, it's impossible to decrypt the key!
(base) C:\Users\basha\Python_CodingDojo\EthureumNetwork>puppeth.exe
  Welcome to puppeth, your Ethereum private network manager
  This tool lets you create a new Ethereum network down to
 the genesis block, bootnodes, miners and ethstats servers without the hassle that it would normally entail.
  Puppeth uses SSH to dial in to remote servers, and builds
  its network components out of Docker containers using the
  docker-compose toolset.
```

```
Please spcify a network name to administer (no spaces, hyphens or capital letters please)
> Bashayer
-{Bashayer
-{Bashaye
```

```
which accounts should be pre-funded? (advisable at least one)
> 0x86x26188777E44091515F8C108A002C7059703BF
> 0x86x261886968f923986ece5586C8889401a
> 0x
Should the precompile-addresses (8x1 .. 0xff) be pre-funded with 1 wei? (advisable yes)
> no

Specify your chain/network ID if you want an explicit one (default = random)
> 2801
-[32mINFO =[0m[12-16][12:33:10.648] Configured new genesis block
what would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Irack new remote server
4. Deploy network components
> 2

1. Modify existing configurations
2. Export genesis configurations
3. Memove genesis configurations
3. Memove genesis configurations
9. **[32mINFO +[0m[12-16][12:33:50.097] Salved native genesis chain spec
-[31mERROR-[0m][12-16][12:33:50.097] Salved native genesis chain spec
-[31mERROR-[0m][12-16][12:33:50.097] Salved genesis chain spec
-[31mEROR-[0m][12-16][12:33:50.097] Salved genesis chain spec
-[31mERROR-[0m][12-16][12:33:50.097] Salved genesis chain spec
-[31mERROR-[0m][12-16][12:33:50.097] Salved genesis chain spec
-[31mEROR-[0m][12-16][12:33:50.097] Salved genesis chain spec
-[31mEROR-[0m][12-16][12:33:50.097]
```

Node 1

```
■ Anaconda Prompt (anaconda3) - geth --datadir node1 --unlock "0x310214998941B6Fe90829033978407293b1457cE" --mine --rpc --allow-insecure-unlock
 (base) C:\Users\basha>cd Python_CodingDojo\EthureumNetwork
  base) C:\Users\basha\Python CodingDojo\EthureumNetwork>geth init --datadir node1 bashayer.json
        [12-16|12:45:39.509] Maximum peer count
[12-16|12:45:39.811] Allocated cache and file handles
                                                                                                                                  database=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node1\\geth\\chaindata cache=16.00M
         dle==16
[12-16]12:45:39.884] Writing custom genesis block
[12-16]12:45:39.889] Persisted trie from memory database
[12-16]12:45:39.939] Successfully wrote genesis state
[12-16]12:45:39.950] Allocated cache and file handles
                                                                                                                                 nodes=3 size=457.00B time=974.8µs gcnodes=0 gcsize=0.00B gctime=0s livenodes=1 livesize=0.00B
database=chaindata hash=c2df0a_0ada1a
database=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node1\\geth\\lightchaindata cache=16
         B handles=16
[12-16][12:45:40.003] Writing custom genesis block
[12-16][12:45:40.016] Persisted trie from memory database
[12-16][12:45:40.042] Successfully wrote genesis state
                                                                                                                                  nodes=3 size=457.00B time=1.0712ms gcnodes=0 gcsize=0.00B gctime=0s livenodes=1 livesize=0.00B database=lightchaindata hash=c2df0a_0ada1a
   oase) C:\Users\basha\Python_CodingDojo\EthureumNetwork>geth init
                                                                                                                                 --datadir node2 bashayer.json
         [12-16|12:45:48.496] Maximum peer count
[12-16|12:45:48.802] Allocated cache and file handles
                                                                                                                                         50 LES=0 total=50
base=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node2\\geth\\chaindata cache=16.00M;
         dle==16
[12-16]12:45:48.839] Writing custom genesis block
[12-16]12:45:48.845] Persisted trie from memory database
[12-16]12:45:48.867] Successfully wrote genesis state
[12-16]12:45:48.878] Allocated cache and file handles
                                                                                                                                  nodes=3 size=457.00B time=992µs gcnodes=0 gcsize=0.00B gctime=0s livenodes=1 livesize=0.00B
database=chaindata hash=c2df0a_0ada1a
database=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node2\\geth\\lightchaindata cache=16
     | [12-16]12:45:48.878] Allocated Cache and File Manuels
MiB handles=16
| [12-16]12:45:48.915] Writing custom genesis block
| [12-16]12:45:48.920] Persisted trie from memory database
| [12-16]12:45:48.947] Successfully wrote genesis state
                                                                                                                                  nodes=3 size=457.00B time=0s gcnodes=0 gcsize=0.00B gctime=0s livenodes=1 livesize=0.00B database=lightchaindata hash=c2df0a...0ada1a
   pase) C:\Users\basha\Python_CodingDojo\EthureumNetwork>geth init --datadir node3 bashayer.json
        [12-16|12:45:55.798] Maximum peer count
[12-16|12:45:56.129] Allocated cache and file handles
                                                                                                                                    TH=50 LES=0 total=50
stabase=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node3\\geth\\chaindata cache=16.00M:
         dle==16
[12-16|12:45:56.240] Writing custom genesis block
[12-16|12:45:56.250] Persisted trie from memory database
[12-16|12:45:56.291] Successfully wrote genesis state
[12-16|12:45:56.309] Allocated cache and file handles
                                                                                                                                 nodes=3\ size=457.00B\ time=495.5\mu s\ gcnodes=0\ gcsize=0.00B\ gctime=0s\ livenodes=1\ livesize=0.00B\ database=chaindata\ hash=c2df0a_0ada1a\ database=C:\Users\basha\Python_CodingDojo\EthureumNetwork\node3\geth\lightchaindata\ cache=16
          | 12-16||12:49:36:309|| Al10cateu tuene and FIEC manufect
| Bandles=16||12:45:56.401|| Writing custom genesis block
| 12-16||12:45:56.401|| Persisted trie from memory database
| 12-16||12:45:56.465|| Successfully wrote genesis state
                                                                                                                                  nodes=3 size=457.00B time=1.3362ms gcnodes=0 gcsize=0.00B gctime=0s livenodes=1 livesize=0.00B
database=lightchaindata hasi=c2df0a..0ada1a
```

```
Anaconda Prompt (anaconda3) - geth --datadir node1 --unlock "0x310214998941B6Fe90829033978407293b1457cE" --mine --rpc --allow-insecure-unlock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n
                                 | C:\Users\basha\Python_CodingDojo\EthureumNetwork/geth | --datadir nodel --unlock "<Public Address of node from above>" --mine --rpc --allow-insecure-unlock provided=102.46 [12:47:29.101] Bumping default cache on mainnet | provided=1024 updated=4096 | ETH=50 | ES=5 total=50 | ES=5
                                                                                                                                                                                                                                                                                                                                                                                                             instance Sector | Communication | Communicatii | Communication | Communication | Communication | Communication
                         | 12-16|12:47:30.248| Opened ancient database | 12-16|12:47:30.248| Opened ancient database | 12-16|12:47:30.317| Initialised chain configuration | 12-16|12:47:30.428| Initialising thereum protocol | 12-16|12:47:30.429| Upgrade blockchain database version | 12-16|12:47:31.259| Loaded most recent local header | 12-16|12:47:31.31.292| Loaded most recent local full block | 12-16|12:47:31.31.292| Loaded most recent local fast block | 12-16|12:47:31.31.292| Loaded most recent local fast block | 12-16|12:47:31.31.31| Upgrade blockchain database version | 12-16|12:47:31.31| Upgrade blockchai
                                                                                                                                                                                                                                                                                                                                                                                                       database=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node1\\geth\\chaindata\\ancient
config="{ChainID: 2891 Homestead: 0 DAO: xnil> DAOSupport: false EIP150: 0 EIP155: 0 EIP158: 0 Byz
                                                                                                                                                                                                                                                                                                                                                                                                          ltems=3 orrorrate=0.000 elapsed=998µs
number=0 hash=c2df0a_0adala
seq=1 id=8755587bce890a5b ip=127.0.0.1 udp=30303 tcp=30303
self=enode://6ca814350d2b67abd695c7390ca1f02d76a6b2d6c47453a2ab6df064296b182b3936a4b547825fa8860f5f
      base) C:\Users\basha\Python_codingDojo\EthureumNetwork>geth --datadir nodel --unlock "0x31021499894186Fe90829033978407293b1457cE" --mine --rpc --allow-insecure-unlo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dated=4096
al=50
                          [12-16|12:51:28.156] Bumping default cache on mainnet [12-16|12:51:28.189] Maximum peer count [12-16|12:51:28.728] Starting peer-to-peer node [12-16|12:51:28.809] Allocated trie memory caches [12-16|12:51:28.818] Allocated cache and file handles
                                                                                                                                                                                                                                                                                                                                                                                                        provided=1024 updated=4096
ETH=50 LES=0 total=50
instance=Geth/v1.9.7-stable-a718daa6/windows-amd64/go1.13.4
clean=1024.00M1B dirty=1024.00M1B
database=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\node1\\geth\\chaindata cache=2.0061B
                            database=C:\\Users\\basha\\Python_CodingDojo\\EthureumNetwork\\nodel\\geth\\chaindata\\ancient config="{ChainID: 2891 Homestead: 0 DAO: <nil> DAOSupport: false EIP150: 0 EIP155: 0 EIP158: 0 BYZ
                                                                                                                                                                                                                                                                                                                                                                                                          }}"
versions="[64 63]" network=1 dbversion=7
number=0 hash=c2df0a_0ada1a td=1 age=45m35s
number=0 hash=c2df0a_0ada1a td=1 age=45m35s
                                 [12-16|12:51:29.372] Initialising Ethereum protocol
[12-16|12:51:30.624] Loaded most recent local header
[12-16|12:51:30.624] Loaded most recent local full block
[12-16|12:51:30.908] Loaded most recent local fast block
[12-16|12:51:31.100] Loaded most recent local fast block
[12-16|12:51:31.49] Regenerated local transaction journal
[12-16|12:51:31.494] Allocated fast sync bloom
[12-16|12:51:31.499] Initialized fast sync bloom
[12-16|12:51:31.495] New local node record
[12-16|12:51:32.306] Started P2P networking
[12-16|12:51:32.306] Started P2P networking
[12-16|12:51:32.378] IPC endpoint opened
                                                                                                                                                                                                                                                                                                                                                                                                                          ersions="[64 63]" network=1 dbversion=7
umbor=0 hash=c2df0a..0ada1a td=1 age=45m35s
umbor=0 hash=c2df0a..0ada1a td=1 age=45m35s
umbor=0 hash=c2df0a..0ada1a td=1 age=45m35s
                                                                                                                                                                                                                                                                                                                                                                                                                                   =2.00GiB
                                                                                                                                                                                                                                                                                                                                                                                                                                  e=2.0061B
ms=3 errornate=0.000 elapsed=0s
=2 id=8753587bce890a5b ip=127.0.0.1 udp=30303 tcp=30303
f=enode://6ca814350d2b67abd695c7390ca1f02d76a6b2d6c47453a2ab6df064296b182b3936a4b547825fa8860f5
                    mpt 1/3

seq=3 id=8753587bce890a5b ip=31.167.154.179 udp=30303 tcp=30303

proto=tcp extport=30303 intport=30303 interface="UPNP IGDv1-IP1"

proto=udp extport=30303 intport=30303 interface="UPNP IGDv1-IP1"

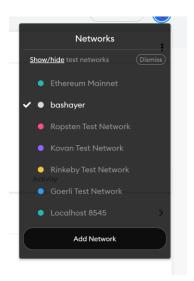
address=90x364Ed04e875480968F621986889401a

fullhash=0xf50cb896af5ae4446bc4c8e66b962e1f595f65e9f1ddc1b47fd06b53f3970f84 recipient=0x5e6E46C092
                              b570aef5b98Ea9BcCE5ce606
[12-16]13:51:31.807] Regenerated local transaction journal [12-16]14:51:31.849] Regenerated local transaction journal [12-16]14:51:31.849] Regenerated local transaction journal [12-16]15:51:31.739] Regenerated local transaction journal [12-16]17:51:31.749] Regenerated local transaction journal [12-16]18:51:31.750] Regenerated local transaction journal [12-16]19:51:31.739] Regenerated local transaction journal [12-16]20:51:31.739] Regenerated local transaction journal [12-16]21:51:31.739] Regenerated local transaction journal [12-16]21:51:31.739] Regenerated local transaction journal [12-16]23:51:31.739] Regenerated local transaction journal [12-17]00:51:31.790] Regenerated local transaction journal [12-17]01:51:31.754] Regenerated local transaction journal [12-17]02:51:31.754] Regenerated local transaction journal
                                            70aef5h9REa9RcCE5ce606
```

```
(hase) C:\Users\basha\Python, CodingDojo\EthureumNetwork
'Python, CodingDojo\EthureumNetwork'
'Python, CodingDojo\EthureumNetwork'
'Python, CodingDojo\EthureumNetwork'
'Python, CodingDojo\EthureumNetwork'
'Rython, CodingDojo\EthureumNetwork'
'Rosa' C:\Users\basha\Python, CodingDojo\EthureumNetwork
'Rosa' C:\Users\basha\Python, CodingDojo\EthureumNetwork
'Rosa' C:\Users\basha\Python, CodingDojo\EthureumNetwork'
'Rosa' C
```

Node 3

The bashayer network:



The Transaction:

