

Testing process:

1. Run the program
2. Enter IP address for first peer
3. Enter port of first peer

```
Please enter IP to connect to:
127.0.0.1
Please enter port to connect to:
7896
Listening on address 127.0.0.1:56327
```

4. If a connection to the desired port is not established, a random port is selected, and the address of the peer is displayed. This address can be used to connect to a peer, or make a transaction from/to it.
5. Run the program in a second terminal
6. Use the address from step 4 to connect to first peer.

```
Please enter IP to connect to:
127.0.0.1
Please enter port to connect to:
56333
Listening on address 127.0.0.1:56336
```

7. The public key of each peer is displayed when peer is initialized, and it can be used to test the application manually.

```
[127.0.0.1:56333], publicKey={"N":6616990735090902166893514063771544619049727948897214810758160439093723709999452953464796232174
95133486435015087671337681907287980430630471574969676374060869502690395287693849998300183404970077697782295472340309715162304643
94103607975729565747425621767700634716470391188951925117177187628517891387799772241082896800022660892000802900750571398520690663
74249747272733888224734545097186242061625254641462931734076433981564533085402030803313279187698764375538315297738047954399406454
48617019059305933549437658953697095655157819867374847537974167468964524516269904208775956468547999048002728580549929093292155154
5887144029,"E_or_d":3}

[127.0.0.1:56336], publicKey={"N":5363328135638570740845795652767979987508872967239067422228501340876154349696620231951540707476
25305160470784813530219314361678780944849678001858139731201471631851731635550254458760883441434982805392167199517123591631879797
14622827584524936980914225098132481156926329340789944377630656998299339311534651130851122513669177827169203294082843134946530053
44773209966407337096451568444414393345838235072802782402246519487301775068126034505959264825397565351620638540494694053200252359
21632723621545028691108128456214971141776856787790119357277330140515268266645363381376299863889981279590540856202723916499460864
8431358141,"E_or_d":3}
```

8. Make a transaction from the first to the second peer by inputting the amount, the address of the sender, and the address of the receiver of the transaction.

```
Please make transactions in the format: AMOUNT FROM TO followed by an empty character!
1234 127.0.0.1:56333 127.0.0.1:56336
```

9. If the signature of the transaction is valid, the result of the transaction (the ledger) should be printed. Then you should be able to observe that the correct accounts are updated by comparing the peer addresses of sender and receiver with the peer addresses corresponding to the public keys from step 7 in the Account name.

```
Account name: {"N":6616990735090902166893514063771544619049727948897214810758160439093723709999452953464796232
17495133486435015087671337681907287980430630471574969676374060869502690395287693849998300183404970077697782295
47234030971516230464394103607975729565747425621767700634716470391188951925117177187628517891387799772241082896
80002266089200080290075057139852069066374249747272733888224734545097186242061625254641462931734076433981564533
08540203080331327918769876437553831529773804795439940645448617019059305933549437658953697095655157819867374847
5379741674689645245162699042087759564685479990480027285805499290932921551545887144029,"E_or_d":3} amount: -123
4
Account name: {"N":5363328135638570740845795652767979987508872967239067422228501340876154349696620231951540707
47625305160470784813530219314361678780944849678001858139731201471631851731635550254458760883441434982805392167
19951712359163187979714622827584524936980914225098132481156926329340789944377630656998299339311534651130851122
51366917782716920329408284313494653005344773209966407337096451568444414393345838235072802782402246519487301775
06812603450595926482539756535162063854049469405320025235921632723621545028691108128456214971141776856787790119
3572773301405152682666453633813762998638899812795905408562027239164994608648431358141,"E_or_d":3} amount: 1234
```