Practical 1 :-

```
Last login: Sat Sep 30 09:08:07 on console
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac MerkleTree.java
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java MerkleTree
Transaction1
Transaction2
Transaction3
Transaction4
6deb126872810c37757961577a780186e3999860be14dc3e06b69d6a19442f11
34c35c4ec3663c278b9785151d63742c34cf9ac27ca2b3facbfff28ba72901e5
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical %
```
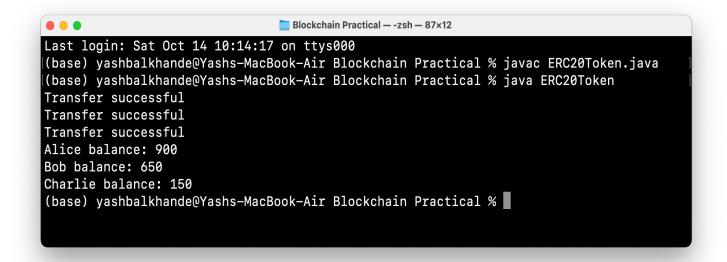
Practical 2 :-

```
Last login: Sat Oct 14 10:10:10 on ttys000
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac Block.java
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java Block
Block mined: 01d90e3ebe5fdbd49c669d2e5bf979383101070618705f167d2b23c13a2c74a7
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical %
```

Practical 3:-

```
Last login: Sat Oct 14 10:13:39 on ttys005
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac Blockchain.java
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java Blockchain
Block mined: 0000dd2c6b89f7315332970622c2e280440bbc97ed1a2c791af4d074ba55d5d9
Block mined: 0000b3a72a35093b185bcf473c4ea0209a0b419d5d6b5b5fee515f8965cff812
Block mined: 000032ddaa290ecaef87c6578b2a1dd737db5ec2c66b8fa716837842c26a0555
Block mined: 00005ad6bd1251de485ccf4eadad1f4a8a43fd38b20218441872b8510316245f
Block chain is valid:true
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical %
```

Practical 4 :-

```
Last login: Sat Oct 14 10:14:17 on ttys000
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac ERC20Token.java
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java ERC20Token
Transfer successful
Transfer successful
Transfer successful
Alice balance: 900
Bob balance: 650
Charlie balance: 150
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical %
```
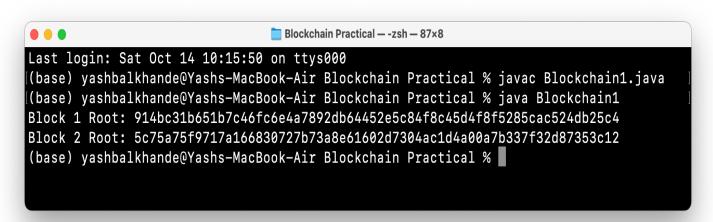
Practical 5 :-

```
Last login: Sat Oct 14 10:15:50 on ttys000
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac Blockchain1.java
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java Blockchain1
Block 1 Root: 914bc31b651b7c46fc6e4a7892db64452e5c84f8c45d4f8f5285cac524db25c4
Block 2 Root: 5c75a75f9717a166830727b73a8e61602d7304ac1d4a00a7b337f32d87353c12
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical %
```

Practical 6 :-

```
Last login: Sat Oct 14 10:17:44 on ttys000
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac BlockchainMiningExample.java
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java BlockchainMiningExample
Block mined:00008eb3c84a6e3f566ca9c85baa843772290e869a1c75519ed297e5c249cfb6
Block mined:00009acb2508fdbbb9853dde63e19af55a61c7d43fe2585031541015aedc2325
Block mined:00003b7c07538ba38942bd3e85aee9f0b76d99250e44e4563b49c91c24c64263
Is block chain valid ? true
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical %
```
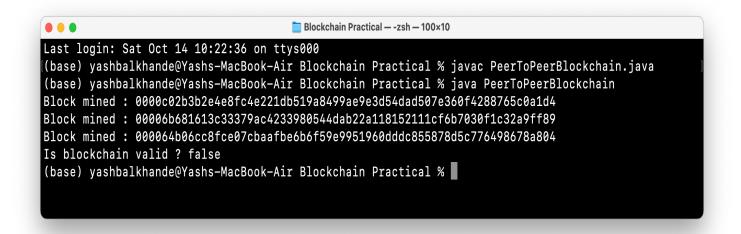
Practical 7 :-

```
● ● ●                    📁 Blockchain Practical — -zsh — 100×10
Last login: Sat Oct 14 10:22:36 on ttys000
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac PeerToPeerBlockchain.java
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java PeerToPeerBlockchain
Block mined : 0000c02b3b2e4e8fc4e221db519a8499ae9e3d54dad507e360f4288765c0a1d4
Block mined : 00006b681613c33379ac4233980544dab22a118152111cf6b7030f1c32a9ff89
Block mined : 000064b06cc8fce07cbaafbe6b6f59e9951960dddc855878d5c776498678a804
Is blockchain valid ? false
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % █
```

Practical 8 :-

```
● ● ●                    📁 Blockchain Practical — -zsh — 100×10
Last login: Sat Oct 14 10:27:36 on ttys000
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % javac CryptoWallet.java
[(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % java CryptoWallet
PrivateKey : sun.security.ec.ECPrivateKeyImpl@f3ab45da
PublicKey : Sun EC public key, 256 bits
  public x coord: 113884226575471263660698246483067148577981658456051761708245369351762068781773
  public y coord: 557855372699898232286738438188296151142604889718025681759608735883703624660099
  parameters: secp256r1 [NIST P-256,X9.62 prime256v1] (1.2.840.10045.3.1.7)
(base) yashbalkhande@Yashs-MacBook-Air Blockchain Practical % █
```