

## Stock Management System

### Buy:-

run:

1. Buy

2. Sell

3. Exit

1

Username:

q1

Password:

123

Number of shares to buy:

19

Price:

15

Seller id:2

Shares to buy:19

Price:10

Total cost:285

BUILD SUCCESSFUL (total time: 10 seconds)

### Sell:-

run:

1. Buy

2. Sell

3. Exit

2

Username:

q1

Password:

123

Number of shares to sell:

10

Price:

15

Buyer id:2

Shares to sell:20

Price:20

Total cost:150

BUILD SUCCESSFUL (total time: 8 seconds)

### Database:-

```
mysql> select * from user;
```

```
+-----+-----+-----+
| uid | username | password |
+-----+-----+-----+
| 0 | q1      | 123      |
| 1 | abc     | xyz      |
| 2 | q2      | 321      |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> select * from buyer;
```

```
+-----+-----+-----+
| uid | nShares | price |
+-----+-----+-----+
|  1 |    30 |   15 |
|  2 |    10 |   20 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> select * from seller;
```

```
+-----+-----+-----+
| uid | nShares | price |
+-----+-----+-----+
|  1 |    15 |   20 |
|  2 |    30 |   10 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

### **Description:-**

Stock Market System (SMS) is basically a co-ordinator type of system wherein a user can buy or sell the stocks of a particular company. There may be many buyers and many sellers of the stock.

The present program consists of three tables: User, Buyer and Seller.

The user table records the registered users details.

The Buyer table has the stocks information of the buyers who wish to buy stock at the price quoted by the seller.

The Seller table has the stocks information of the sellers who wish to sell stocks at the price quoted by them in the table.

In case of Buying, after authenticating the user, the user is asked for number of stocks and price at which he wants to buy the stock. If the price matches with the entry in the Sell table or if an entry with lesser value is found in the table, then transaction succeeds else it fails.

In case of Selling, after authenticating the user, the user is asked for number of stocks and price at which he wants to sell the stock. If the price matches with the entry in the Buy table or if an entry with higher value is found in the table, then transaction succeeds else it fails.

Thus this is how the stock market system works.