

An Analysis on Stock Market using Database Management System

to be submitted in partial fulfilling of the requirements for the course on

Database Management Systems – ITE 1003 (A1 & A2)

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Abstract

The objective of this project is to develop a Stock Analysis system that is basically for the Investors coming into the domain of Stock Market where they can learn about how the stock market works based on the previous data which is already fed into the system.

The exchange is seen as associate degree everyday a part of life in any economy is it developed or assemblage countries. because the world is step by step moving to the data age that a significant characteristic of this age is speed; speed in causation messages, speed in health care delivery, speed in banking, there's a necessity for investors to be able to monitor their investments with speed. during this work, we tend to introduce P-Stock, associate degree application for observance the activities that maintain within the exchange. It tracks exchange activities likewise as mistreatment the info that has been pooled to calculate the values of stock in associate degree investor's portfolio bushed time period. it's hoped that this may facilitate new investors in observance their investments primary while not would like for his or her brokers.

KEYWORDS: Database, Stock Analysis, Sensex, User, stock market; stock observance

Introduction

In recent years the study of data analysis has apparently moved from collection and storage topics to more descriptive and scientific issues. Thus, to study the data analysis approaches, we have found the patterns of research and transferred to the popular subjects. EMC Digital World Research has pointed out that global data capacity is a field which is in a state of constant change. The quantities of data are increased from 4.4ZB to 44ZB, the effective information from the retrieval data becomes a significant concern in a wide variety such as the investments of stock, fund etc.

The stock exchange represents the key institution for the development of capital market of any country. Thus the information system of every stock exchange must satisfy very strict international standards.

Stock market includes daily activities like sensex calculation, exchange of shares. The exchange provides an efficient and transparent market for trading in equity, debt instruments and derivatives. Analysis of stocks using database management systems will be useful for new investors to invest in stock market based on the various factors considered by the software.

In this paper we tend to show the quality and feasibleness of applying typical SQL queries for analysing a good spectrum of information streams. As application space we've chosen the analysis of stock exchange knowledge, principally as a result of this sort of application exhibits sufficiently several of these characteristics that relative question technology may be thought of a valuable instrument during a stream context. The ensuing TInTo system may be a tool for computing questionable technical indicators, numerical values calculated from an explicit reasonably stock exchange knowledge, characterizing the event of stock costs over a given period. Update propagation is employed for the progressive re-computation of indicator views outlined over a stream of incessantly dynamical worth knowledge.

Data Requirements

Index

Role:- The Companies are listed under some type of index generally in India in NSE(National Stock Exchange) or BSE(Bombay Stock Exchange)

- Registration number as Primary Key
- □ Date of Listing

Company

Role: Corporations in which the liability of each shareholder is limited to the amount individually invested. The most common form of the company used for business ventures.

- 「 C NAME
- □ REVENUE

• Role:

In accounting, revenue is the income that a business has from its normal business activities, usually from the sale of goods and services to customers.

Revenue is also referred to as sales or turnover. Some companies receive revenue from interest, royalties, or other fees.

- 「 PROFIT
- □ EXPENSES

SHARES

Role: In financial markets, a share is a unit used as mutual funds, limited partnerships, and real estate investment trusts. The owner of shares in the company is a shareholder of the corporation. A share is an indivisible unit of capital, expressing the ownership relationship between the company and the shareholder.

- 「 S NAME
- □ NO. OF SHARES
- □ LOT SIZE

Role: In terms of stocks, the lot is the number of shares you purchase in one transaction.

「 FACE VALUE

Role: The face value, also known as par value, is the legal capital of the share.

CUSTOMER

Role: A customer is an individual or institution that legally owns one or more shares of stock in a public or private corporation. Shareholders may be referred to as members of a corporation.

- 「 NAME
- NO. OF SHARES PURCHASED
- 「 C_ID
- □ PH NO

□ BROKER

Role: The main role of the broker is to manage other customer while buying the shares

```
□ BROKER ID
```

□ CURRENCY

Role: The Currency is the basis for the Transaction

- ^r CODE
- 「 NAME
- 「 IS_BASE
- Γ IS_ACTIVE

□ BILL

- 「 BILL ID
- □ BILL DATE
- □ BILL DESCN

- 1) All the customers must be provided with the C_Id and password for them.
- 2) A customer can purchase any number of shares in a company.
- 3) A share can be purchased jointly by one or more customers.
- 4) Transactions is a weak entity type with foreign key C_Id
- 5) A Company gets registered in the primary market to provide a share to the public and raise funds.
- 6) The shares are identified by S_name while companies are identified by C_name.
- 7) Admin will be provided with a username and password using them he can manage the database.
- 8) Index is Identified by Companies Registration number
- 9) Index is Related as Indexing the company in the Share Market

The Market lot is the amount of shares to be provided by the company for the minimum transaction amount of shares allowed for the share transactions.

Functional Requirements

Company

Requirement	Description
C01	The company shall be able to register in the primary market to provide a share to the public and raise funds.
C02	The company shall be able to see the statistical data view of stock market analysis to predict the investor's opinion of itself.

Shares

Requirement	Description
S01	The Current Fluctuation in the Share price can be controlled by the Regulatory
S02	The amount of shares issued by the company shall be updated by the company while listing it on the Index

Customer

Requirement	Description
U01	The customer shall be provided with C_Id and password to login to access the database.
U02	The customer shall be able to inquire about a particular company stock market data.
U03	The customer shall be able to view the statistical depiction of the stock analysis.

Index

Requirement	Description
I01	Index shall decide where the stock has to be listed and in which region its transactions will be shown.

Broker

Requirement	Description
I01	Index shall decide where the stock has to be listed and in
	which region its transactions will be shown.

Scenarios of Removal Of Old data

When the customer sells the shares it has to be removed from the customer base.

When the company is unlisted it has to be removed from the database

Scenarios of Data Modification

When the market value of Share is Decreased or Increased accordingly we have to modify its current price

When the company issues new shares the current share value has to be modified

Scenarios of Data Retrieval

Г	No. Of Shares currently held by the customer
Г	Net Profit/Loss for the Customer
Γ	Date of Purchase or Sell of Shares for the Customer

Company details its Current market value and No. of Shares

NON FUNCTIONAL REQUIREMENTS:

- 1. **Reliability:** The reliability of the product will be dependent on the accuracy of the data, date of purchase, how much stock was purchased, high and low value range as well as opening and closing figures.
- 2. **Security:** The user will only be able to access the software using his login details and will not be able to access the computations happening at the back end.
- 3. **Maintainability:** The maintenance of the product would require the database to be updated with recent values.
- 4. **Portability:** The software is completely portable.
- 5. **Interoperability:** The interoperability of the software is very high because it synchronizes all the database with the server.

OUTPUT DESIGN:

Outputs from stock market analysis systems are required primarily to communicate the results of analysis to users. They are also used to provide a permanent copy of the results for later consultation.

The_routputs should be defined in terms of the following points:

Type of the output

Content of the output

Format of the output

Frequency of the output

Volume of the output

Sequence of the output

INPUT DESIGN:

INPUT TYPES:

It is necessary to determine the various types of inputs.

Inputs can be categorized as follows:

External inputs, which are prime inputs for the stock market analysis system..

Internal inputs, which are user communications with the system.

Interactive, which are inputs entered during a dialogue.

INPUT MEDIA:

At this stage choice has to be made about the input media. To conclude about the input media consideration has to be given to:

- □ Type of input
- r Speed
- Verification methods
- □ Rejection rates
- Ease of correction
- Storage and handling requirements
- Security
- Easy to use

Portability

Keeping in view the above description of the input types and input media, it can be said that most of the inputs are of the form of external and interactive. As input data is to be the directly keyed in by the user, the keyboard can be considered to be the most suitable input device. For external input i.e the raw dataset of old stock market values of a company is collected from various websites.

ERROR AVOIDANCE:

At this stage care is to be taken to ensure that input data remains accurate form the stage at which it is recorded upto the stage in which the data is accepted by the system. This can be achieved only by means of careful control each time the data is handled.

ERROR DETECTION:

Even though every effort is made to avoid the occurrance of errors, still a small proportion of error is always likely to occur, these types of errors can be discovered by using validations to check the input data.

DATA VALIDATION OF CUSTOMER:

Procedures are designed to detect errors in data at a lower level of detail. Data validations have been included in the system in almost every area where there is a possibility for the user to commit errors.

USER INTERFACE DESIGN

COMPUTER-INITIATED INTERFACES:

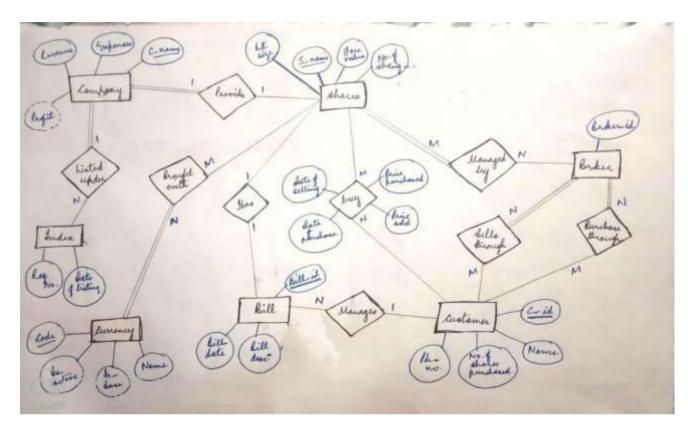
The following computer – initiated interfaces are used:

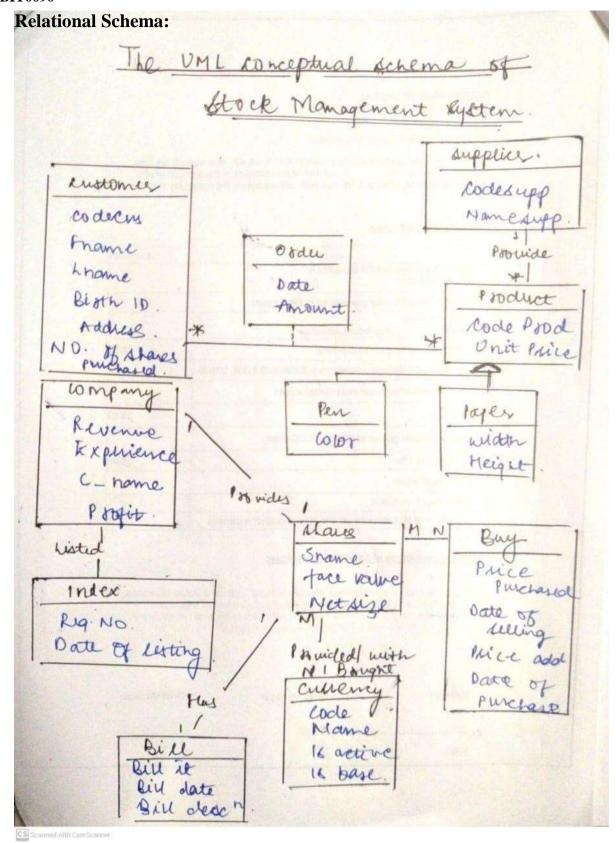
- 1. The Stock market query management system for the user is presented with an analysis of the company's shares which enables investors to identify the intrinsic worth of a security even before investing in it.
- 2. Statistical Data Analysis Pie Charts and Bar Graphs are used to statistically depict the analysis of a particular company's stock market of which the user has inquired about.

ERROR MESSAGE DESIGN:

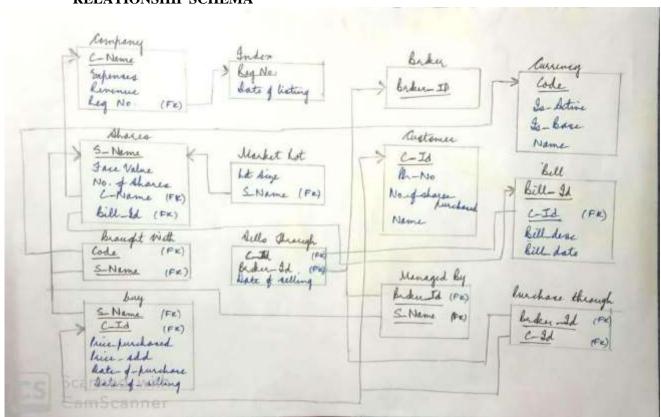
The design of error messages is an important part of the user interface design. As user is bound to commit some errors or other while designing a stock market query management system it should be implemented in such a way that it is helpful by providing the user with information regarding the error he/she has committed.

E.R DIAGRAM:





RELATIONSHIP SCHEMA



Database:

```
SQL> create table index_proj(
 2 reg_no Number(5) primary key,
 3 date of listing date);
Table created.
SQL> create table company_proj(
 2 c_name varchar(20) primary key,
 3 expenses number(9),
 4 revenue number(9),
 5 reg no references index proj);
Table created.
SQL> create table broker_proj(
 2 broker_id number(5) primary key
 3);
Table created.
SQL> create table shares(
SQL> create table bill proj(
 2 bill_id number(5) primary key,
 3 bill_cust_id number(5),
 4 bill_descn varchar(20),
 5 bill_date date);
Table created.
SQL> create table currency_proj(
 2 code varchar(5) primary key, 3
 is_base varchar(5),
 4 is_active varchar(5),
 5 name varchar(20)
 6);
```

Table created.

```
SQL> create table shares_proj(
 2 s name varchar(20) primary key,
 3 face_value number(6),
 4 no of shares number(10),
 5 c_name references company_proj,
 6 bill id references bill proj);
Table created.
SQL> create table brought_with_proj(
2 code references currency_proj,
 3 s_name references shares_proj
 4);
Table created.
SQL> create table customer_proj(
 2 c_id number(7) primary key,
 3 ph_no number(10),
 4 no_of_shares_purchased number(10),
 5 name varchar(20),
 6 Bill_id references
bill_proj); Table created.
SQL> create table managed_by_proj(
 2 broker id references broker,
 3
SQL> create table managed_by_proj(
 2 broker_id references broker_proj, 3
 s_name references shares_proj);
```

Table created.

```
SQL> create table purchases_through_proj(
2 broker_id references broker_proj,
3 c_id references customer_proj);
```

Table created.

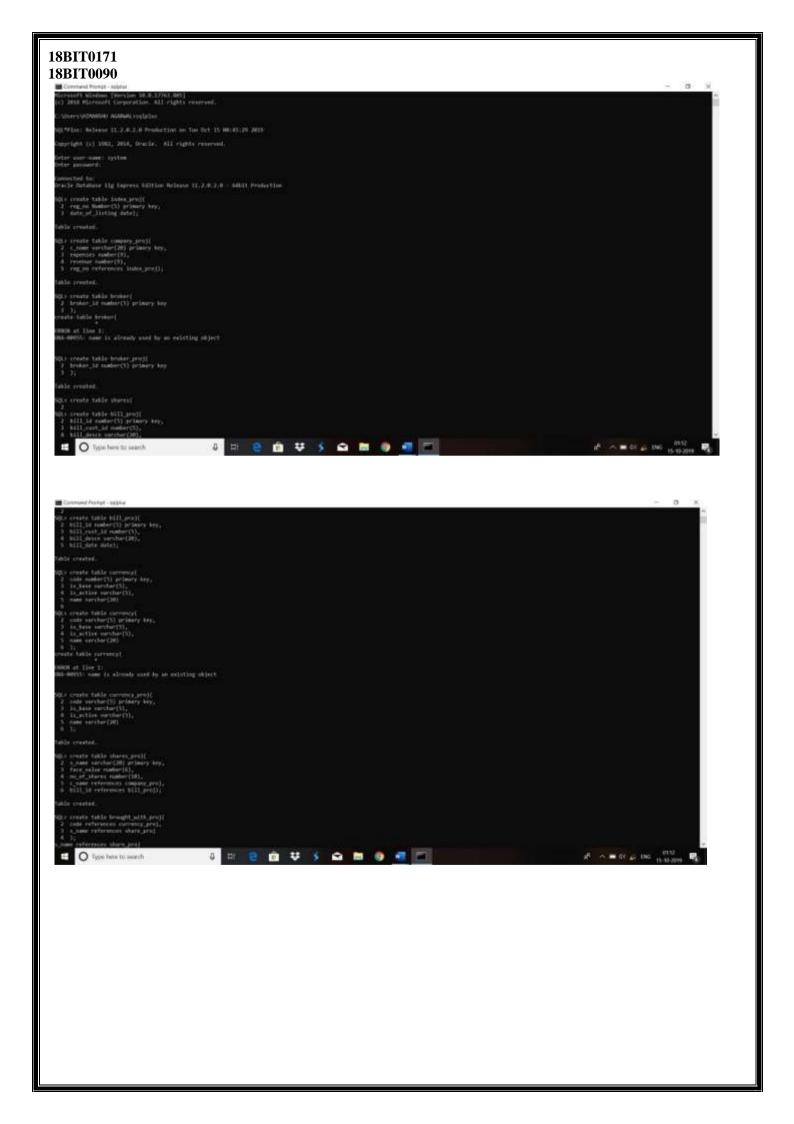
```
SQL> create table market_lot_proj(
  2 lot_size number(4),
  3 s_name references shares_proj);
```

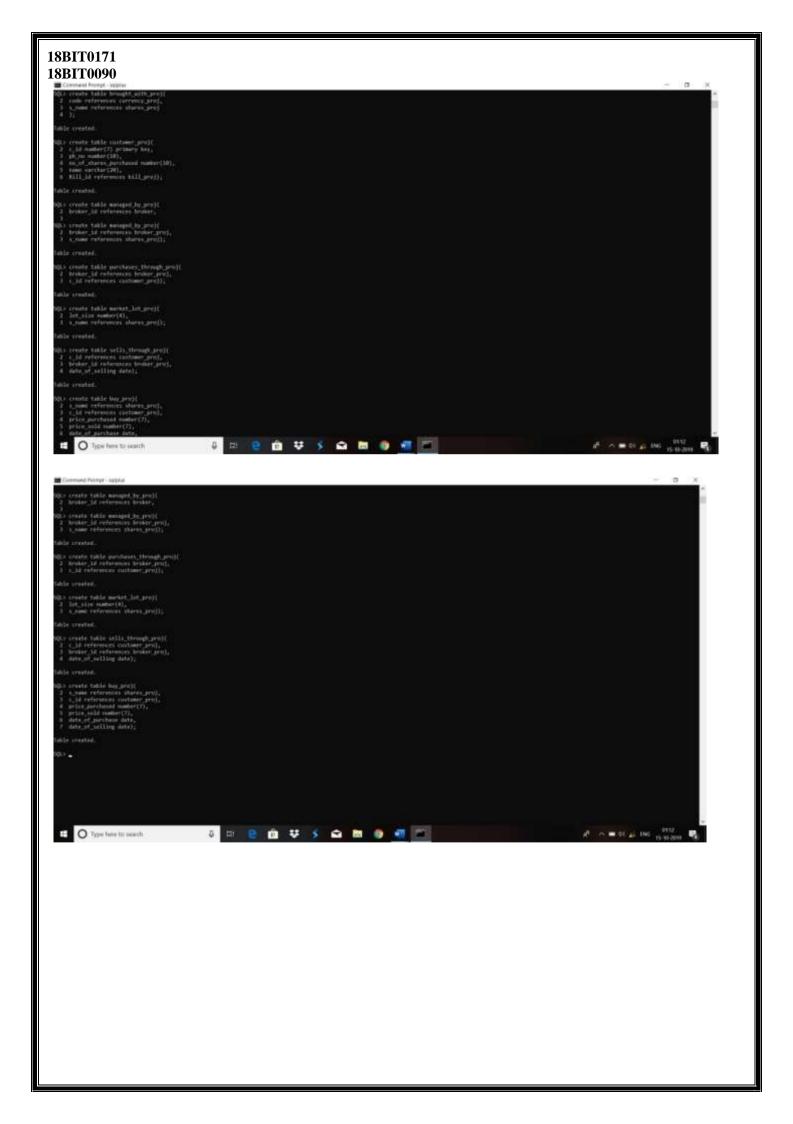
Table created.

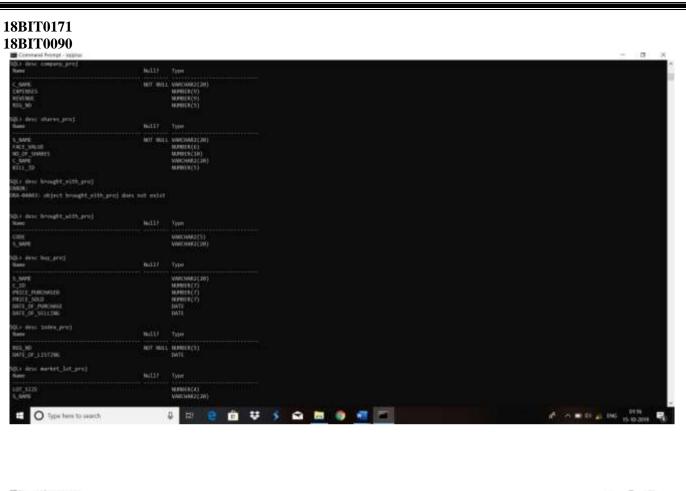
```
SQL> create table sells_through_proj(
2 c_id references customer_proj,
3 broker_id references broker_proj,
4 date_of_selling date);
```

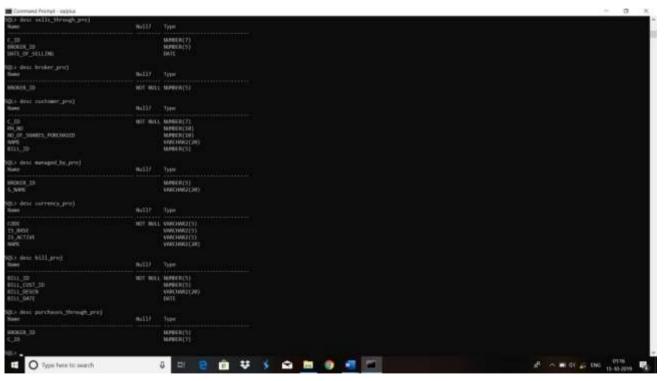
Table created.

```
SQL> create table buy_proj(
2 s_name references shares_proj,
3 c_id references customer_proj,
4 price_purchased number(7),
5 price_sold number(7),
6 date_of_purchase date,
7 date_of_selling date);
Table created.
```









```
18BIT0090
       SOL> insert into customer proj values(111,8989898989,400,'ABCDEF'); 1 row
       created.
       SQL> insert into bill proj values(1,111, 'Purchase', to date('13-10-19', 'dd-mm-yy');
       insert into bill proj values(1,111, Purchase', to date('13-10-19', 'dd-mm-yy')
       ERROR at line 1:
       ORA-00917: missing comma
       SQL> insert into bill_proj values(1,111,'Purchase',to_date('13-10-19','dd-mm-yy'));
       1 row created.
       SQL> select * from shares_proj; no
       rows selected
       SQL> insert into shares_proj values('Reliance Ltd',450,40000,'Reliance',1); 1 row
       created.
       SQL> insert into market_lot_proj(10,'Reliance Ltd'); insert into
       market_lot_proj(10,'Reliance Ltd')
       ERROR at line 1:
       ORA-00928: missing SELECT keyword
       SQL> insert into market_lot_proj values(10,'Reliance Ltd'); 1 row
       created.
```

SQL> create table brought_with_proj('INR','Reliance Ltd'); create

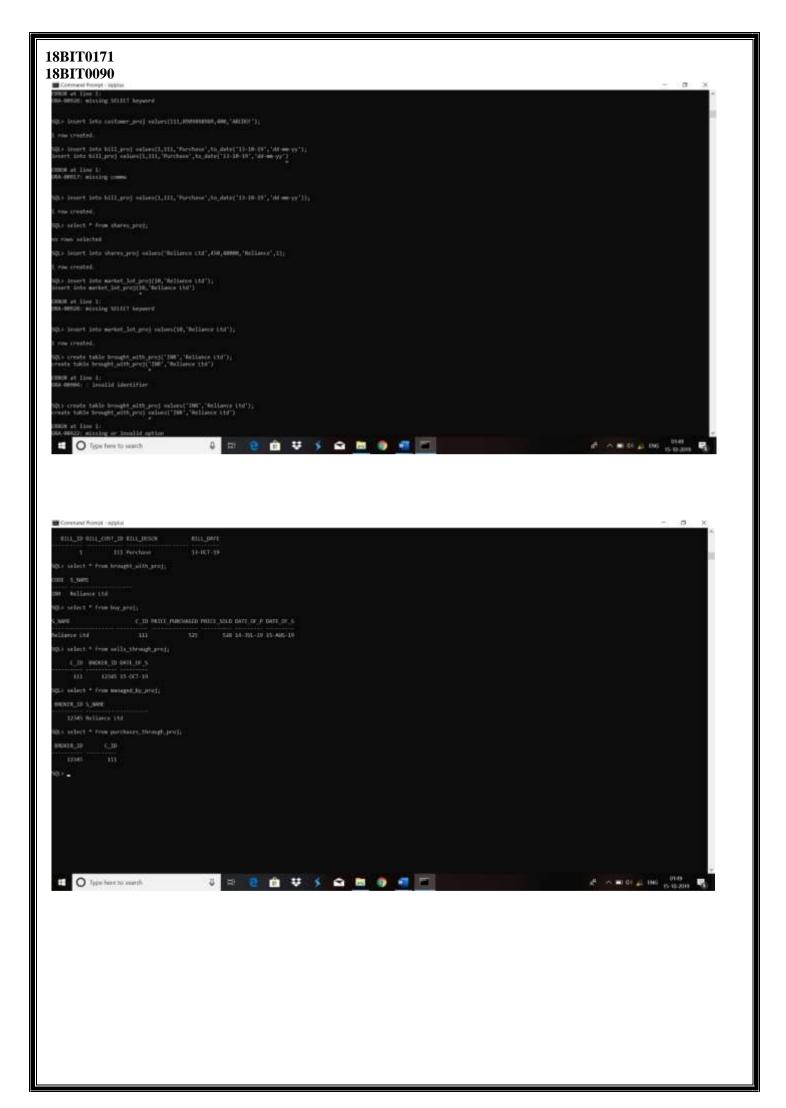
table brought_with_proj('INR','Reliance Ltd')

18BIT0171

```
ERROR at line 1:
ORA-00904: : invalid identifier
SQL> create table brought_with_proj values('INR','Reliance Ltd'); create table
brought_with_proj values('INR','Reliance Ltd')
ERROR at line 1:
ORA-00922: missing or invalid option
SQL> insert into brought_with_proj values('INR','Reliance Ltd'); 1 row
created.
SQL> insert into sells_through_proj values(111,12345,to_date('15-10-19','dd-mm-yy'));
1 row created.
SQL> insert into managed_by_proj values(12345, 'Reliance Ltd'); 1 row
created.
SQL> insert into purchases_through_projvalues(12345,111); 1 row
created.
SQL> insert into buy_proj values('Reliance Ltd',111,525,528,to_date('14-07-19','dd-
mm-yy'),to_date('15-08-19','dd-mm-yy'));
1 row created.
SQL> select * from index_proj;
  REG_NO DATE_OF_L
----- 11111
   10-OCT-10
SQL> select * from company_proj;
```

	EXPENSES REVENUE REG_NO	
	5800000 7800000 11111	
SQL> select * fro	om shares_proj;	
	FACE_VALUE NO_OF_SHARES C_NAME	BILL_ID
	450 40000 Reliance 1	
SQL> select * fro	rom customer_proj;	
	_NO NO_OF_SHARES_PURCHASED NAME	
	8989 400 ABCDEF	
SQL> select * fro	rom market_lot_proj;	
LOT_SIZE S_N		
10 Reliance		
SQL> select * fro	rom broker_proj;	
BROKER_ID		
12345		
SQL> select * fro	rom currency_proj;	
CODE IS_BA IS	S_AC NAME	
INR Yes Yes Ind	dian Rupees SQL>	
select * from bill	l_proj;	
	L_CUST_ID BILL_DESCN BILL_DATE	
	1 Purchase 13-OCT-19	

SQL> select * from brought_with_proj;		
CODE S_NAME		
INR Reliance Ltd		
SQL> select * from buy_proj;		
S_NAME C_ID PRICE_PURCHASED PRICE_SOLD DATE_OF_P DATE_OF_S Peliance I td		
Reliance Ltd 111 525 528 14-JUL-19 15-AUG-19		
SQL> select * from sells_through_proj;		
C_ID BROKER_ID DATE_OF_S		
111 12345 15-OCT-19		
SQL> select * from managed_by_proj;		
BROKER_ID S_NAME		
12345 Reliance Ltd		
SQL> select * from purchases_through_proj;		
BROKER_ID C_ID		
12345 111		

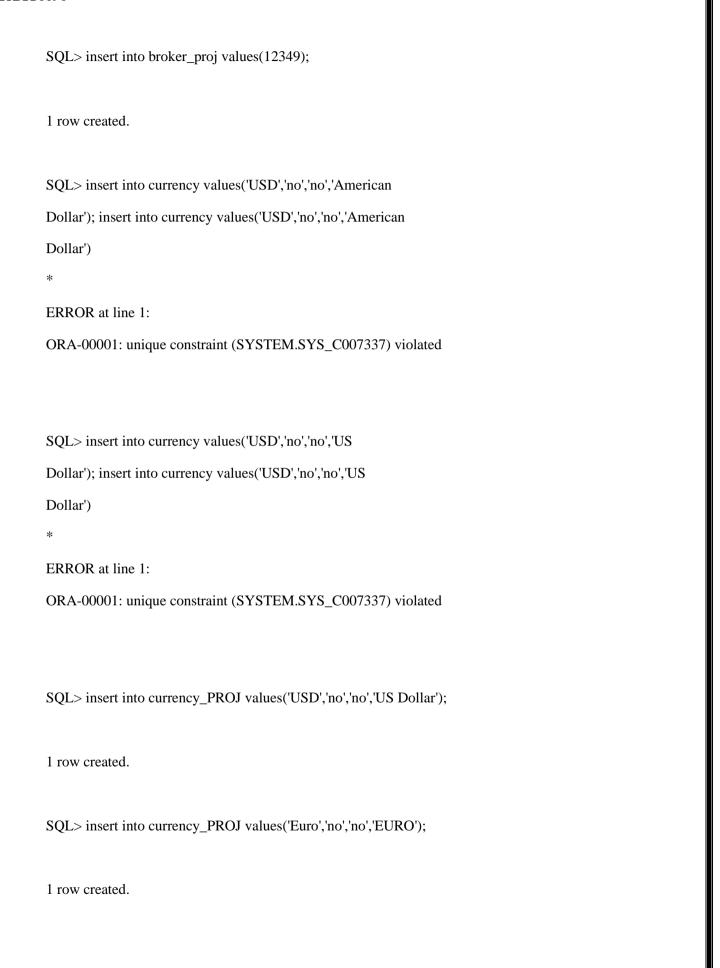


```
18BIT0171
18BIT0090
       SQL> select * from
        company_proj 2;
       C_NAME EXPENSESREVENUE REG_NO
       Reliance
                      5800000 7800000 11111
       SQL> insert into index_proj values(22222,to_date('10-09-2010','dd-mm-
       yyyy'); insert into index_proj values(22222,to_date('10-09-2010','dd-mm-
       yyyy')
       ERROR at line 1:
       ORA-00917: missing comma
       SQL> insert into index_proj values(22222,to_date('10-09-2010','dd-mm-yyyy'));
       1 row created.
       SQL> insert into index_proj values(33333,to_date('10-08-2010','dd-mm-yyyy'));
       1 row created.
       SQL> insert into index_proj values(44444,to_date('10-07-2010','dd-mm-yyyy'));
       1 row created.
```

```
SQL> insert into index_proj values(55555,to_date('10-06-2010','dd-mm-yyyy'));
1 row created.
SQL> insert into company_proj values('Shell india',4000000,7800000,22222);
1 row created.
SQL> insert into company_proj values('Shell
india',7000000,8800000,33333); insert into company_proj values('Shell
india',7000000,8800000,33333)
ERROR at line 1:
ORA-00001: unique constraint (SYSTEM.SYS_C007383) violated
SQL> insert into company_proj values('HPCL',7000000,8800000,33333);
1 row created.
SQL> insert into company_proj values('Balaji store',6000000,9800000,44444);
1 row created.
SQL> insert into shares_proj values('Shell ltd',300,50000,'Shell
india'); insert into shares_proj values('Shell ltd',300,50000,'Shell
india')
```

18BIT0171 18BIT0090 ERROR at line 1: ORA-00947: not enough values SQL> insert into customer_proj values(222,8172856627,500,'Sarthak'); 1 row created. SQL> insert into customer_proj values(333,9889073505,600,'Shivam'); 1 row created. SQL> insert into customer_proj values(444,9140286432,700,'Harshita'); 1 row created. SQL> insert into customer_proj values(555,9794775121,200,'Virat'); 1 row created. SQL> insert into bill_proj values(2,222,Purchase,to_date('13-09-2019','dd-mmyyyy')); insert into bill_proj values(2,222,Purchase,to_date('13-09-2019','dd-mmyyyy')) ERROR at line 1: ORA-00984: column not allowed here

18BIT0171 18BIT0090 SQL> insert into bill_proj values(2,222, 'Purchase', to_date('13-09-2019', 'dd-mm-yyyy')); 1 row created. SQL> insert into bill_proj values(3,333,'Sell',to_date('13-08-2019','dd-mm-yyyy')); 1 row created. SQL> insert into bill_proj values(4,444,'Purchase',to_date('13-07-2019','dd-mm-yyyy')); 1 row created. SQL> insert into bill_proj values(5,333,'Purchase',to_date('13-06-2019','dd-mm-yyyy')); 1 row created. SQL> insert into broker_proj values(12346); 1 row created. SQL> insert into broker_proj values(12347); 1 row created. SQL> insert into broker_proj values(12348); 1 row created.



18BIT0171 18BIT0090 SQL> desc shares; Name Null? Type ______ ----- S_NAME NOT NULL VARCHAR2(20) FACEVALUE NUMBER(5,2)NUMBER_OF_SHARES NUMBER(5) SQL> select * from customer_proj; C_ID PH_NO NO_OF_SHARES_PURCHASED NAME 400 111 8989898989 **ABCDEF** 222 8172856627 500 Sarthak 333 9889073505 600 Shivam 444 9140286432 700 Harshita 555 9794775121 200 Virat SQL> insert into shares_proj values('Shell ltd',300,40000,'Shell india',2); 1 row created. SQL> insert into shares_proj values('HPCL ltd',300,50000,'HPCL',5);

SQL> insert into shares_proj values('bal ltd',100,300000,'balaji store',3);

insert into shares_proj values('bal ltd',100,300000,'balaji store',3)

1 row created.

18BIT0171 18BIT0090 ERROR at line 1: ORA-02291: integrity constraint (SYSTEM.SYS_C007389) violated - parent key not found SQL> insert into shares_proj values('bal ltd',100,300000,'Balaji store',3); 1 row created. SQL> insert into market_lot_proj values(20,'bal ltd'); 1 row created. SQL> insert into market_lot_proj values(40,'HPCL ltd'); 1 row created. SQL> insert into market_lot_proj values(100,'Shell ltd'); 1 row created. SQL> select * from bill_proj; BILL_ID BILL_CUST_ID BILL_DESCN BILL_DATE 111 Purchase 13-OCT-19 1

2	222 Purchase	13-SEP-19
3	333 Sell	13-AUG-19

4 444 Purchase 13-JUL-19

5 333 Purchase 13-JUN-19

SQL> select * from customer_proj;

C_ID PH_NO NO_OF_SHARES_PURCHASED NAME

111 8989898989	400 ABCDEF
222 8172856627	500 Sarthak
333 9889073505	600 Shivam
444 9140286432	700 Harshita
555 9794775121	200 Virat

 $SQL> insert\ into\ buy_proj\ values('Shell\ ltd',222,295,315,to_date('13-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'));$

1 row created.

 $SQL> insert\ into\ buy_proj\ values('HPCL',333,300,310,to_date('03-10-2019','dd-mm-yyyy'),to_date('13-10-2019','dd-mm-yyyy'));$

insert into buy_proj values('HPCL',333,300,310,to_date('03-10-2019','dd-mm-yyyy'),to_date('13-10-2019','dd-mm-yyyy'))

*

ERROR at line 1:

ORA-02291: integrity constraint (SYSTEM.SYS_C007402) violated - parent key

not found

```
SQL> insert into buy_proj values('HPCL',333,300,310,to_date('03-10-2019','dd-
mm- yyyy'),to_date('23-10-2019','dd-mm-yyyy'));
insert into buy_proj values('HPCL',333,300,310,to_date('03-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','dd-mm-yyyyy'),to_date('23-10-2019','d
2019','dd-mm-yyyy'))
ERROR at line 1:
ORA-02291: integrity constraint (SYSTEM.SYS_C007402) violated - parent key
not found
SQL>
SQL> insert into buy_proj values('HPCL',333,300,310,to_date('03-10-2019','dd-
mm- yyyy'),to_date('23-10-2019','dd-mm-yyyy'));
insert into buy_proj values('HPCL',333,300,310,to_date('03-10-2019','dd-mm-yyyy'),to_date('23-10-
2019','dd-mm-yyyy'))
ERROR at line 1:
ORA-02291: integrity constraint (SYSTEM.SYS_C007402) violated - parent key
not found
SQL> insert into buy_proj values('HPCL ltd',333,300,310,to_date('03-10-2019','dd-
mm- yyyy'),to_date('23-10-2019','dd-mm-yyyy'));
1 row created.
SQL> insert into brought_through_proj values('INR','Shell
ltd'); insert into brought_through_proj values('INR','Shell ltd')
```

18BIT0171 18BIT0090 * ERROR at line 1: ORA-00942: table or view does not exist SQL> insert into brought_with_proj values('INR','Shell ltd'); 1 row created. SQL> insert into brought_with_proj values('INR','HPCL ltd'); 1 row created.

SQL> insert into brought_with_proj values('INR','bal ltd');

SQL> insert into managed_by_proj values(12346,'HPCL ltd');

SQL> insert into sells_through_proj values(333,12346,to_date('23-10-2019','dd-mm-yyyy'));

SQL> insert into sells_through_proj values(222,12347,to_date('23-10-2019','dd-mm-yyyy'));

1 row created.

1 row created.

1 row created.

18BIT0171 18BIT0090 1 row created. SQL> insert into managed_by_proj values(12347,'Shell ltd'); 1 row created. SQL> insert into managed_by_proj values(12348,'bal ltd'); 1 row created. SQL> insert into purchases_through_proj values(12346,333); 1 row created. SQL> insert into purchases_through_proj values(12347,222); 1 row created. SQL> select * from company_proj; C_NAME EXPENSESREVENUE REG_NO Reliance 5800000 7800000 11111 Shell india 4000000 7800000 22222

7000000 8800000

6000000 9800000

33333

44444

HPCL

Balaji store

18BIT0171 18BIT0090 SQL> select * from index_proj; REG_NO DATE_OF_L 11111 10-OCT-10 22222 10-SEP-10 33333 10-AUG-10 44444 10-JUL-10 55555 10-JUN-10 SQL> select * from broker_proj; BROKER_ID -----12345 12346 12347 12348 12349 SQL> select * from currency_proj; CODE IS_BA IS_AC NAME ----INR Yes Yes Indian Rupees USD no no US Dollar Euro no no EURO

SQL> select * from shares_proj;

S NAME	FACE VALUE NO	OF SHARES C NAME	BILL ID
D_IM IMIL	TACL_VALUETIO_		DILL_ID

 Reliance Ltd
 450
 40000 Reliance
 1

 Shell ltd
 300
 40000 Shell india
 2

 HPCL ltd
 300
 50000 HPCL
 5

 bal ltd
 100
 300000 Balaji store
 3

SQL> select * from market_lot_proj;

LOT_SIZE S_NAME

10 Reliance Ltd

20 bal ltd

40 HPCL ltd

100 Shell ltd

SQL> select * from customer_proj;

C_ID PH_NO NO_OF_SHARES_PURCHASED NAME

111 8989898989	400 ABCDEF
222 8172856627	500 Sarthak
333 9889073505	600 Shivam
444 9140286432	700 Harshita

18BIT017	1
18BIT009	0

555 9794775121 200 Virat

SQL> select * from bill_proj;

BILL_ID BILL_CUST_ID BILL_DESCN BILL_DATE

1 111 Purchase 13-OCT-19

2 222 Purchase 13-SEP-19

3 333 Sell 13-AUG-19

4 444 Purchase 13-JUL-19

5 333 Purchase 13-JUN-19

SQL> select * from buy_proj;

S_NAME C_ID PRICE_PURCHASED PRICE_SOLD DATE_OF_P DATE_OF_S

Reliance Ltd 111 525 528 14-JUL-19 15-AUG-

19

Shell ltd 222 295 315 13-OCT-19 23-OCT-19

HPCL ltd 333 300 310 03-OCT-19 23-OCT-19

SQL> select * from brought_with_proj;

CODE S_NAME

-- INR HPCL ltd

INR Reliance Ltd

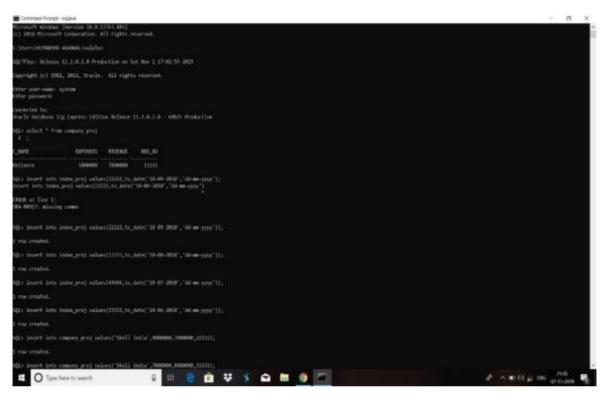
INR Shell ltd

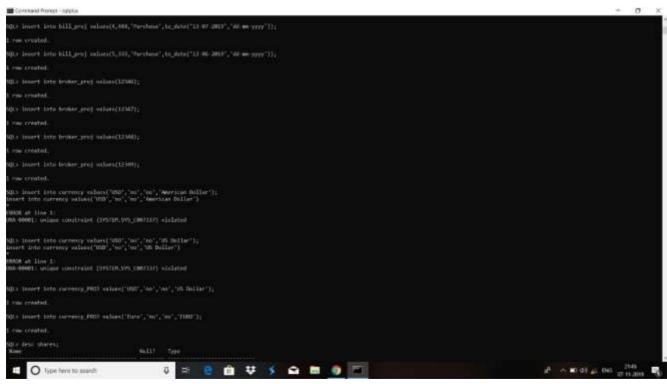
```
18BIT0171
18BIT0090
       18BIT0118 INR bal ltd
      SQL> select * from sells_through_proj;
         C_ID BROKER_ID DATE_OF_S
          111 12345 15-OCT-19
          333 12346 23-OCT-19
          222 12347 23-OCT-19
      SQL> select * from managed_by_proj;
       BROKER_ID S_NAME
        12345 Reliance Ltd
         12346 HPCL ltd
         12347 Shell ltd
         12348 bal ltd
      SQL> select * from purchases_through_proj;
       BROKER_ID C_ID
      -----
         12345
                 111
         12346
                 333
         12347
                 222
```

18BIT0118 SQL> commit;

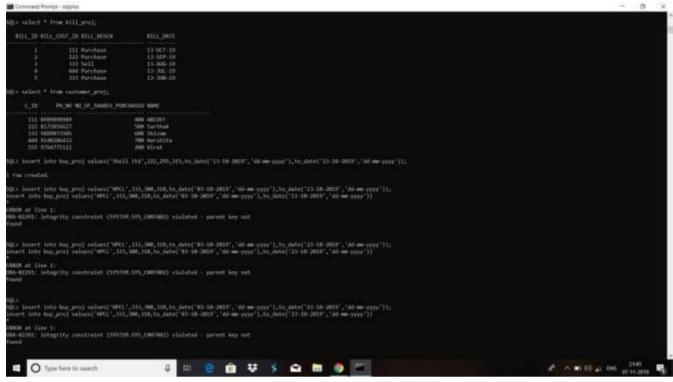
Commit

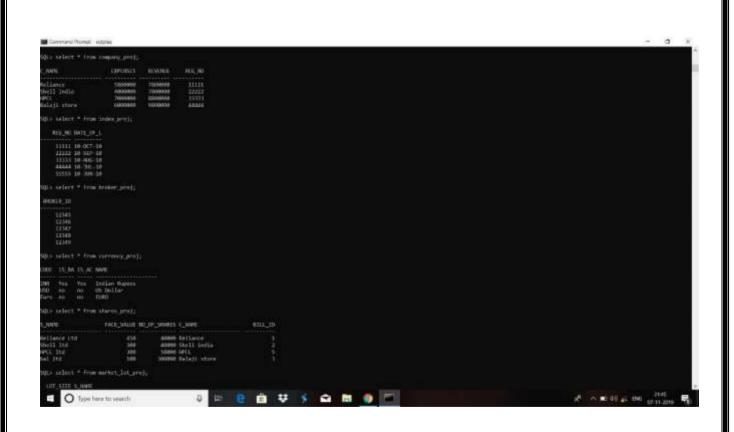
complete. SQL>

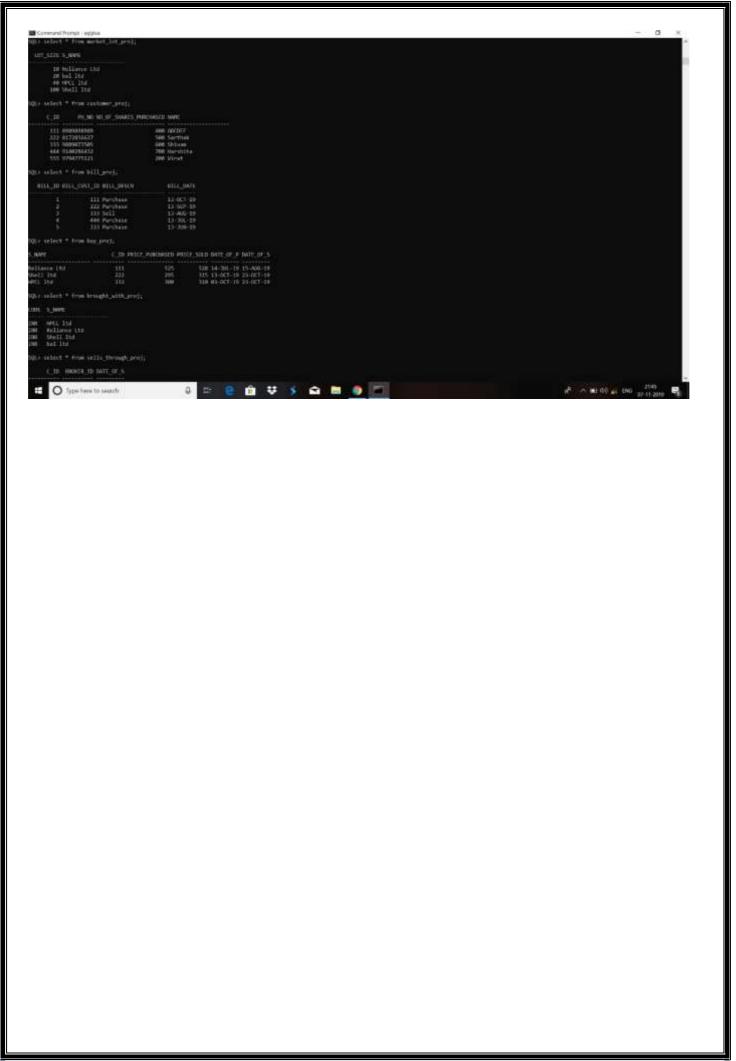




18BIT0171 18BIT0090 NCT BULL VARCHME2(20) NUMBER(5) NUMBER(5) QC: insert into stares proj estarel bal 162, 300, 100000, 'halaji stare', 3]; seart into stares proj values('hal lis', 100, 100000, 'halaji stare', 3) MCR at line 1: UA 62291: Letagrity commitment (SYSTEM.SYS_COM/SMS) violated - person key not C Type Reno to sourch 3 Ein 😩 🖺 😌 🛣 🧖 🛅 🤵 🔚 Dis insert bets company gray values("Salaji chara",6000000,5000000,84442); Do insert ions sheen jump salars? Stell ind', 300, 30000, Stell india'); skert ions sheen jump salars? Stell ind', 300, 30000, Stell india'); Q.) lesert little customer proj velaes(222,817809627,500,"Serther"); \$3.5 insert into exchangery proj. velos (133,988907390,000,"161von"); DOR at live 1: at second column not allowed here 🖸 🔘 Type here to seach 4 🖽 🤨 🛊 🛣 🧑 🎏 10 0 00 11 100 710 P







Retrieval:

1. To find the share name given we have the date of listing

SQL> select s_name from shares_proj where c_name in(select c_name from company_proj where reg_no in(select reg_no from index_proj where date_of_listing = '10-OCT-10'));

S_NAME		
Reliance Ltd		

2 To display only those shares where the face_value>200 and to print them in order of their share name.

SQL> select c_name from company_proj minus select s_name from shares_proj where face_value>200 group by s_name;

C_NAME
----Balaji store

HPCL Reliance

Shell india

1. .

_

OQLI silect comme from company proof blook solact comme from absence proof where face contactors.	
C-SWE	
No. Agil store Helianis Shell India	

2. To find out the share name and name of the customer given the number of shares_purchased>500.

SQL> select s_name,name from shares_proj inner join bill_proj on bill_proj.bill_id=shares_proj.bill_id inner join customer_proj on customer_proj.c_id=bill_proj.bill_cust_id where customer_proj.no_of_shares_purchased>500;

3. To display all the shares name which starts with 'H' or 'S' and display them in order of their share name.

SQL> select s.s_name from shares_proj s,market_lot_proj m where m.s_name=s.s_name

group by s.s_name having (s.s_name like 'H%' or s.s_name like 'S%');

S_NAME
-----HPCL ltd
Shell ltd

98: select a a name from sharea proj a market jut proj a shere a a name-s a name group by a a name booling (a a name 11ke '98' or a a name 11ke '98'); a jage 1991: 11d 1981: 11d 1981:

Updation:

1. To update the customers phone number(interactively) based on the customer id provided to them.

SQL> update customer_proj set ph_no=&ph_no where c_id in(select c_id from customer_proj where c_id=&c_id);

```
Enter value for ph_no: 888888888 Enter
```

```
value for c_id: 111
```

old 1: update customer_proj set ph_no=&ph_no where c_id in(select c_id from customer_proj where c_id=&c_id)

new 1: update customer_proj set ph_no=888888888 where c_id in(select c_id from customer_proj where c_id=111)

1 row updated.

SQL> select * from customer_proj

2;

C_ID PH_NO NO_OF_SHARES_PURCHASED NAME

111 888888888	400 ABCDEF
222 8172856627	500 Sarthak
333 9889073505	600 Shivam
444 9140286432	700 Harshita
555 9794775121	200 Virat

```
SQL> update customer_proj set ph_no=&ph_no where c_id in(select c_id from customer_proj where c_id=&c_id);
Enter value for ph_no: 88888888888
Enter value for c_id: 111
     1: update customer_proj set ph_no=&ph_no where c_id in(select c_id from customer_proj where c_id=&c_id)
    1: update customer_proj set ph_nom8888888888 where c_id in(select c_id from customer_proj where c_id=111)
 row updated.
SQL> select * from customer_proj
     C ID
               PH_NO_NO_OF_SHARES_PURCHASED_NAME
      111 888888888
                                        400 ABCDEF
      222 8172856627
                                        500 Sarthak
      333 9889073505
                                        600 Shivam
      444 9140286432
                                        700 Harshita
      555 9794775121
                                        200 Virat
```

2. To update the lot size of a particular share(interactively) based on the share name provided.

SQL> update market_lot_proj set lot_size=&lot_size where s_name in(select s_name from shares_proj where s_name='&s_name');

```
Enter value for lot_size: 20
Enter value for s_name: Reliance Ltd
old 1: update market_lot_proj set lot_size=&lot_size where s_name in(select s_name from
shares_proj where s_name='&s_name')
new 1: update market_lot_proj set lot_size=20 where s_name in(select s_name from
shares_proj where s_name='Reliance Ltd')
1 row updated.
SQL> select * from market_lot_proj 2;
 LOT_SIZE S_NAME
     20 Reliance Ltd
     20 bal ltd
     40 HPCL ltd
   100 Shell ltd
```

```
SQL> update market_lot_proj set lot_size=&lot_size where s_name in(select s_name from shares_proj where s_name='&s_name');
Enter value for lot_size: 20
Enter value for s_name: Reliance Ltd
old 1: update market_lot_proj set lot_size=&lot_size where s_name in(select s_name from shares_proj where s_name='&s_name')
new 1: update market_lot_proj set lot_size=20 where s_name in(select s_name from shares_proj where s_name='Reliance Ltd')

1 row updated.

SQL> select * from market_lot_proj
2 ;

LOT_SIZE S_NAME

20 Reliance Ltd
20 bal ltd
40 HPCL ltd
100 Shell ltd
```

Deletion:

1. To delete a particular share name from database where share name is taken as input from user interactively.

SQL> delete from market_lot_proj where s_name in(select s_name from shares_proj where s_name='&s_name');

Enter value for s_name: Reliance

old 1: delete from market_lot_proj where s_name in(select s_name from shares_proj where s_name='&s_name')

new 1: delete from market_lot_proj where s_name in(select s_name from shares_proj where s_name='Reliance')

0 rows deleted.

```
SQL> delete from market_lot_proj where s_name in(select s_name from shares_proj where s_name='&s_name');
Enter value for s_name: Reliance
old 1: delete from market_lot_proj where s_name in(select s_name from shares_proj where s_name='&s_name')
new 1: delete from market_lot_proj where s_name in(select s_name from shares_proj where s_name='Reliance')
0 rows deleted.
SQL>
```

2. To delete a particular currency code from the database where code starts with 'f'.

SQL> delete from currency_proj where code in(select code from currency_proj where code like 'f%');

0 rows deleted.

```
SQL> delete from currency_proj where code in(select code from currency_proj where code like 'f%');
0 rows deleted.
SQL>
```

