**Handson On Sql**

**A)** Create the table PROGRAMMER with the given information using SQL CREATE TABLE command:

CREATE TABLE PROGRAMME

( EmpNo numeric(5) not null, ProjId numeric(5) not null,

LastName varchar(30) , FirstName varchar(30),

HireDate DATE, Language varchar(15),

TaskNo numeric(2), Privilege varchar(25));

**B)** Insert the following data into the PROGRAMMER table:

INSERT INTO PROGRAMMER VALUES(201,'Gupta','Saurav','01/01/95','NPR','VB',52,'Secret');

INSERT INTO PROGRAMMER VALUES(390,'Ghosh','Pinky','01/05/93','KCW','Java',11,'Top Secret');

INSERT INTO PROGRAMMER VALUES(789,'Agarwal','Praveen','08/31/98','VB','RNC',11,'Secret');

INSERT INTO PROGRAMMER VALUES(134,'Chaudhury','Supriyo','07/15/95','TIPPS','C++',52,'Secret');

INSERT INTO PROGRAMMER VALUES(896,'Jha','Ranjit','06/15/97','KCW','Java',10,'Top Secret');

INSERT INTO PROGRAMMER VALUES(345,'John','Peter','11/15/99','KCW','Java',52,null);

INSERT INTO PROGRAMMER VALUES(563,'Anderson','Andy','08/15/94','NITTS','C++',89,'Confendital');

SELECT \* FROM PROGRAMMER;

mysql> SELECT \* FROM PROGRAMMER;

+-------+--------+----------+-----------+------------+----------+--------+--------------+

| EmpNo | ProjID | LastName | FirstName | HireDate | Language | TaskNo | privilege |

+-------+--------+----------+-----------+------------+----------+--------+--------------+

| 201 | NITTS | guptha | saurav | 1995-01-01 | C++ | 52 | Secret |

| 390 | KCW | Ghosh | pinky | 1993-01-05 | Java | 11 | Top Secret |

| 789 | rnc | Agarwal | Praveen | 1998-08-31 | VB | 11 | Secret |

| 896 | KCW | JHA | RANJIT | 1997-06-15 | JAVA | 10 | TOP Secret |

| 345 | TIPPS | JOHN | PETER | 1999-11-15 | JAVA | 52 | NULL |

| 563 | NITTS | ANDERSON | ANDY | 1994-08-15 | C++ | 89 | CONFIDENTIAL |

+-------+--------+----------+-----------+------------+----------+--------+--------------+

6 rows in set (0.08 sec)

C) Create a table WEATHER with following data:

( City numeric(15) , State numeric(20),

High numeric(3) , Low numeric(3),

CONSTRAINT WEATHER\_PK PRIMARY KEY (City));

INSERT INTO WEATHER VALUES('Calcutta','West Bengal',105,90);

INSERT INTO WEATHER VALUES('TRivandrum','Kerala',101,92);

INSERT INTO WEATHER VALUES('Mumbai','Maharashtra',88,69);

INSERT INTO WEATHER VALUES('Bangalore','Karnataka',77,60);

INSERT INTO WEATHER VALUES('New Delhi',null,80,72);

SELECT \* FROM WEATHER;

d)   Create a table BOOKS with the following data:-

CREATE TABLE BOOKS

( BookId INT(3) NOT NULL auto\_increment,

Title VARCHAR(5) NOT NULL,

TopicId VARCHAR(5),Publisher Name VARCHAR(15),

Place of Publication VARCHAR(15),

Price INT(3),PurchaseDate DATE, ShelfNo VARCHAR(5));

CONSTRAINT BOOKS\_PK PRIMARY KEY (BookId));

INSERT INTO BOOKS VALUES

(8293,'DBMS','DB1','Prentice Hall','Mumbai',255,1/1/95,'S11');

INSERT INTO BOOKS VALUES

(5645,'DBMS','DB1','Pearson Education','Mumbai',655,1/05/93,'S12');

INSERT INTO BOOKS VALUES

(6565,'C','C1','TMH','Mumbai',840,08/31/98,'S66');

INSERT INTO BOOKS VALUES

(6567,'C++','Cplus1','ABC Publisher','Delhi',300,07/15/95,'S77');

INSERT INTO BOOKS VALUES

(4576,'JAVA','JAVA1','Guru Govind','Delhi',500,06/15/95,'S87');

INSERT INTO BOOKS VALUES

(3433,'OOPS','OPSS1','Dave Publisher','Pune',600,11/15/99,'S56');

INSERT INTO BOOKS VALUES

(4655,'SAD','SAD1','Sajan Publication','Cochin',700,08/15/94,'S76');

SELECT \* FROM BOOKS;

mysql> SELECT \* FROM BOOKS;

+--------+-------+---------+---------------------+----------------------+-------+---------------+---------+

| BOOKID | TITLE | TOPICID | PUBLISHER\_NAME | PLACE\_OF\_PUBLICATION | PRICE | PURCHASE\_DATE | SHELFNO |

+--------+-------+---------+---------------------+----------------------+-------+---------------+---------+

| 3433 | OOPS | OOPS1 | DAVE PUBLICATIONS | PUNE | 600 | 1999-11-15 | S56 |

| 4576 | JAVA | JAVA1 | GURU GOVIND | DELHI | 500 | 1997-06-15 | S87 |

| 4655 | SAD | SAD1 | SANJAN PUBLICATIONS | COCHIN | 700 | 1994-08-15 | S76 |

| 5645 | DBMS | DB1 | PEARSON EDUCATION | MUMBAI | 655 | 1993-01-05 | S10 |

| 6565 | C | C1 | TMH | MUMBAI | 840 | 1998-08-31 | S66 |

| 6567 | C++ | CPLUS1 | ABC PUBLISHERS | DELHI | 300 | 1995-07-15 | S77 |

| 8293 | DBMS | DB1 | PRENTICE HALL | MUMBAI | 255 | 1995-01-01 | S10 |

+--------+-------+---------+---------------------+----------------------+-------+---------------+---------+

7 rows in set (0.05 sec)

e) Saurav Gupta is assigned a different project with id NITTS and he would work with C++ now. Update this change in the PROGRAMMER table.

Ans—UPDATE ‘PROGRAMMER’ SET ProjId = ‘C++’ WHERE EmpNo=201;

ii)   The books on DBMS are shifted to shelf with number S10. Please update this detail in BOOKS table.

Ans- UPDATE ‘BOOKS’ SET ShelfNo = ‘S10’ WHERE TITLE= ‘DBMS’;

iii)  Supriyo Chaudhury has resigned his job. Incorporate this change in the table PROGRAMMER.

Ans-DELETE  FROM ‘PROGRAMMER’ WHERE BOOKID=134;

iv)    A new column to state the nature of the climate with either of the value (rainy, cloudy, sunny, snow) is to be added in the WEATHER Table.

Ans--alter table ‘WEATHER’ add column ‘NATURE’ varchar(15) after CITY;

INSERT INTO WEATHER (‘rainy’,’cloudy’,’sunny’,’snow’);

 v)   Delete the table WEATHER from database.

Ans- drop table WEATHER;

**B) CUSTOMER Table Schema:**

CREATE TABLE CUSTOMER

( CUSTID numeric(5) not null, FNAME varchar(5) not null,

LNAME varchar(30) , ADDRESS varchar(30),PHONENO numeric (10),

CITY varchar(15), COUNTRY varchar(10),

HireDate DATE, SUPPLIERID numeric(2) PRIMARY KEY (CUSTID)

CONSTRAINT  FK\_SUPPLIER FOREIGN KEY (SUPPLIERID)  
   REFERENCES CUSTOMER(CUSTID));

INSERT INTO CUSTOMER VALUES

(1001,'Das','Jeyaseelan',’119,park Avenue,II street’ ,9841093428, ’Coimbatore’, ’India’,10-jan-2004, 1);

INSERT INTO CUSTOMER VALUES

(2001,’Gopi’,'Govindraj', ’119, ‘**241**, I floor, Kamaraj street, Madippakkam, 9444124590, ’Chennai’,’ India’, 25-march-2005, 4);

INSERT INTO CUSTOMER VALUES

(1201,'Dilip','Kishore',’43,II Avenue, Anna Nagar’ ,9997234534 ,’Bangalore’,’India’,20-Aug-2005, 2);

INSERT INTO CUSTOMER VALUES

(1300, ’Aanand’, 'Chowdhury', ’42/1 sector 1,II street’, 9841054348, ’Bangalore’

’ India’, 15-may-2005, 2);

INSERT INTO CUSTOMER VALUES

(1200, 'Chandra','Nagarajan','83,lal bagh',98410672356,’Bangalore’, ’ India’,

12-feb-2006, 4);

INSERT INTO CUSTOMER VALUES

(1221,’Abhishek’,’Kumar’ ,'13,kishori park', 94447623901, ’Chennai’, ’India’, 15-may-2004, 1);

INSERT INTO CUSTOMER VALUES

(1320, ’Nikhil ’, ’pandit’ ,'218,alwaanya', 94448923091, ’Salem’, ’India’, 21-april-2006, 3);

INSERT INTO CUSTOMER VALUES

(1225, ‘Pavan’ ’, ‘Kumar’ ,'128/A,North Mada Street', 99934782103, ‘’maduari, ’India’, 18-aug-2004, 4);

INSERT INTO CUSTOMER VALUES

(1222, ‘Meenu’ ’, ’Monica’ ,'C11,church', 98410563421, ’Trichy’, ’India’, 30-aug-2004, 1);

SELECT \* FROM CUSTOMER;

mysql> SELECT \* FROM CUSTOMER;

+--------+----------+------------+------------------------------------------+-------------+------------+---------+----------------------+------------+

| CUSTID | FNAME | LNAME | ADDRESS | PHONENO | CITY | COUNTRY | DATE\_FIRST\_PURCHASED | SUPPLIERID |

+--------+----------+------------+------------------------------------------+-------------+------------+---------+----------------------+------------+

| 1001 | DAS | JEYASEELAN | 119,PARK AVENUE,II STREET | 9841093428 | COIMBATORE | INDIA | 2014-01-10 | 1 |

| 1201 | DILIP | KISHORE | 43,II AVENUE,ANNA NAGAR | 9997234534 | BANGALORE | INDIA | 2004-08-20 | 2 |

| 1220 | CHANDRA | NAGARAJAN | 83,LAL BAGH | 9841067236 | BANGALORE | INDIA | 2006-02-12 | 4 |

| 1221 | ABHISHEK | KUMAR | 13,KISHORI PARK | 9337326890 | CHENNAI | INDIA | 2004-05-15 | 1 |

| 1222 | MEENU | MONICA | C11,CHURCH ROAD | 98410563421 | Trichy | India | 2004-08-30 | 1 |

| 1225 | PAVAN | KUMAR | 128/A, North Mada Street | 99934782103 | maduari | INDIA | 2004-08-04 | 4 |

| 1300 | AANAND | CHOUDHARY | 42/1 SECTOR 1, II STREET | 9841054348 | BANGALORE | INDIA | 2005-05-15 | 2 |

| 1320 | NIKHIL | PANDIT | 218,ALWANYA STREET | 9448923091 | SALEM | INDIA | 2006-04-21 | 3 |

| 2001 | GOPI | GOVINDRAJ | 241, I FLOOR,KAMARAJ STREET, MADIPPAKKAM | 9444124590 | CHENNAI | INDIA | 2005-03-25 | 4 |

+--------+----------+------------+------------------------------------------+-------------+------------+---------+----------------------+------------+

9 rows in set (0.03 sec)

**C) Supplier Table Schema:-**

CREATE TABLE SUPPLIER (SUPPLIERID NUMERIC(1) PRIMARY KEY, SNAME VARCHAR(20), SCITY VARCHAR(15),SPHONE VARCHAR(11) NOT NULL,EMAIL VARCHAR(20) );

INSERT INTO SUPPLIER (SUPPLIERID , SNAME , SCITY,SPHONE,EMAIL) VALUES (1,'DILIP','CHENNAI',9997234534,'DILIP@ABC.CO.IN');

INSERT INTO SUPPLIER (SUPPLIERID , SNAME , SCITY,SPHONE,EMAIL) VALUES (2,'TARUN','MADURAI',8999991111,'TARUN@XYZ.COM');

INSERT INTO SUPPLIER (SUPPLIERID , SNAME , SCITY,SPHONE,EMAIL) VALUES (3,'NARESH','COIMBATORE',8999992222,'G.NARESH@XYZL.COM');

INSERT INTO SUPPLIER (SUPPLIERID , SNAME , SCITY,SPHONE,EMAIL) VALUES (4,'GANESAN','TRICY',8999993333,'GANESAN@IJK.COM');

SELECT \* FROM SUPPLIER;

+------------+---------+------------+------------+-------------------+

| SUPPLIERID | SNAME | SCITY | SPHONE | EMAIL |

+------------+---------+------------+------------+-------------------+

| 1 | DILIP | CHENNAI | 9997234534 | DILIP@ABC.CO.IN |

| 2 | TARUN | MADURAI | 8999991111 | TARUN@XYZ.COM |

| 3 | NARESH | COIMBATORE | 8999992222 | G.NARESH@XYZL.COM |

| 4 | GANESAN | TRICY | 8999993333 | GANESAN@IJK.COM |

+------------+---------+------------+------------+-------------------+

**D) Create table ITEMS:-**

CREATE TABLE ITEMS (ITEMID NUMERIC(2) PRIMARY KEY,ITEMNAME VARCHAR(35) NOT NULL,SUPPLIERID NUMERIC(1),MINQTY NUMERIC(2) NOT NULL,MAXQTY NUMERIC(2) NOT NULL,PRICE NUMERIC(5,2));

INSERT INTO ITEMS VALUES (20,'Pears Soap',4,7,20,30.00);

INSERT INTO ITEMS VALUES (21,'V.V.D. Coconut oil 200 ml',2,8,15,79.00);

INSERT INTO ITEMS VALUES (23,'Reynolds pen- blue',1,10,30,15.00);

INSERT INTO ITEMS VALUES (24,'Reynolds pen- blue',1,10,30,16.00);

INSERT INTO ITEMS VALUES (25,'Mysore sandal soap',4,7,25,25.00);

INSERT INTO ITEMS VALUES (26,'Fair & lovely',3,5,15,55.00);

INSERT INTO ITEMS VALUES (27,'Rexono deo spary',2,5,20,100.00);

INSERT INTO ITEMS VALUES (28,'Dove soap',4,7,15,85.00);

SELECT \* FROM ITEMS;

+--------+---------------------------+------------+--------+--------+--------+

| ITEMID | ITEMNAME | SUPPLIERID | MINQTY | MAXQTY | PRICE |

+--------+---------------------------+------------+--------+--------+--------+

| 20 | Pears Soap | 4 | 7 | 20 | 30.00 |

| 21 | V.V.D. Coconut oil 200 ml | 2 | 8 | 15 | 79.00 |

| 22 | Ponds powder 400g | 3 | 6 | 25 | 106.00 |

| 23 | Reynolds pen- blue | 1 | 10 | 30 | 15.00 |

| 24 | Reynolds pen- blue | 1 | 10 | 30 | 16.00 |

| 25 | Mysore sandal soap | 4 | 7 | 25 | 25.00 |

| 26 | Fair & lovely | 3 | 5 | 15 | 55.00 |

| 27 | Rexono deo spary | 2 | 5 | 20 | 100.00 |

| 28 | Dove soap | 4 | 7 | 15 | 85.00 |

+--------+---------------------------+------------+--------+--------+--------+

ALTER TABLE ORDERS ADD CONSTRAINT FK\_ITEMID FOREIGN KEY(ITEMID) REFERENCES ITEMS(ITEMID);

1. Display all customers from Chennai.

SELECT \* FROM CUSTOMER WHERE CITY LIKE 'CHENNAI';

+--------+----------+-----------+------------------------------------------+------------+---------+---------+----------------------+------------+

| CUSTID | FNAME | LNAME | ADDRESS | PHONENO | CITY | COUNTRY | DATE\_FIRST\_PURCHASED | SUPPLIERID |

+--------+----------+-----------+------------------------------------------+------------+---------+---------+----------------------+------------+

| 1221 | ABHISHEK | KUMAR | 13,KISHORI PARK | 9337326890 | CHENNAI | INDIA | 2004-05-15 | 1 |

| 2001 | GOPI | GOVINDRAJ | 241, I FLOOR,KAMARAJ STREET, MADIPPAKKAM | 9444124590 | CHENNAI | INDIA | 2005-03-25 | 4 |

1. Display the details of all customers who purchased from the supplier

SELECT \* FROM CUSTOMER WHERE SUPPLIERID=2;

| CUSTID | FNAME | LNAME | ADDRESS | PHONENO | CITY

| COUNTRY | DATE\_FIRST\_PURCHASED | SUPPLIERID |

+--------+--------+-----------+--------------------------+------------+-----------+---------+----------------------+------------+

| 1201 | DILIP | KISHORE | 43,II AVENUE,ANNA NAGAR | 9997234534 | BANGALORE | INDIA | 2004-08-20 | 2 |

| 1300 | AANAND | CHOUDHARY | 42/1 SECTOR 1, II STREET | 9841054348 | BANGALORE | INDIA | 2005-05-15 | 2 |

+--------+--------+-----------+--------------------------+------------+-----------+---------+----------------------+------------+

1. Display CUSTID, FNAME, LNAME of all customers whose purchase date is after January 2005.

SELECT CUSTID,FNAME,LNAME FROM CUSTOMER WHERE DATE\_FIRST\_PURCHASED >'2005/1/1';

+--------+---------+------------+

| CUSTID | FNAME | LNAME |

+--------+---------+------------+

| 1001 | DAS | JEYASEELAN |

| 1220 | CHANDRA | NAGARAJAN |

| 1300 | AANAND | CHOUDHARY |

| 1320 | NIKHIL | PANDIT |

| 2001 | GOPI | GOVINDRAJ |

+--------+---------+------------+

1. Display the details of all suppliers who are from location Coimbatore.

SELECT \* FROM SUPPLIER WHERE SCITY LIKE 'COIMBATORE';

+------------+--------+------------+------------+-------------------+

| SUPPLIERID | SNAME | SCITY | SPHONE | EMAIL |

+------------+--------+------------+------------+-------------------+

| 3 | NARESH | COIMBATORE | 8999992222 | G.NARESH@XYZL.COM |

+------------+--------+------------+------------+-------------------+

v) Display the details of all suppliers whose name stars with G.

SELECT \* FROM SUPPLIER WHERE SNAME LIKE 'G%';

+------------+---------+-------+------------+-----------------+

| SUPPLIERID | SNAME | SCITY | SPHONE | EMAIL |

+------------+---------+-------+------------+-----------------+

| 4 | GANESAN | TRICY | 8999993333 | GANESAN@IJK.COM |

+------------+---------+-------+------------+-----------------+

vi) Display the details of all customers, who do not have the alphabet e in their LNAME.

SELECT \* FROM CUSTOMER WHERE LNAME NOT LIKE '%E%';

+--------+----------+-----------+------------------------------------------+-------------+-----------+---------+----------------------+------------+

| CUSTID | FNAME | LNAME | ADDRESS | PHONENO | CITY | COUNTRY | DATE\_FIRST\_PURCHASED | SUPPLIERID |

+--------+----------+-----------+------------------------------------------+-------------+-----------+---------+----------------------+------------+

| 1220 | CHANDRA | NAGARAJAN | 83,LAL BAGH | 9841067236 | BANGALORE | INDIA | 2006-02-12 | 4 |

| 1221 | ABHISHEK | KUMAR | 13,KISHORI PARK | 9337326890 | CHENNAI | INDIA | 2004-05-15 | 1 |

| 1222 | MEENU | MONICA | C11,CHURCH ROAD | 98410563421 | Trichy | India | 2004-08-30 | 1 |

| 1225 | PAVAN | KUMAR | 128/A, North Mada Street | 99934782103 | maduari | INDIA | 2004-08-04 | 4 |

| 1300 | AANAND | CHOUDHARY | 42/1 SECTOR 1, II STREET | 9841054348 | BANGALORE | INDIA | 2005-05-15 | 2 |

| 1320 | NIKHIL | PANDIT | 218,ALWANYA STREET | 9448923091 | SALEM | INDIA | 2006-04-21 | 3 |

| 2001 | GOPI | GOVINDRAJ | 241, I FLOOR,KAMARAJ STREET, MADIPPAKKAM | 9444124590 | CHENNAI | INDIA | 2005-03-25 | 4 |

+--------+----------+-----------+------------------------------------------+-------------+-----------+---------+----------------------+------------+

vii) Display the details of all the orders where the quantity is less than 35.

SELECT \* FROM ORDERS WHERE QUANTITY <35;

+---------+------------+--------+----------+--------+

| ORDERID | ORDERDATE | CUSTID | QUANTITY | ITEMID |

+---------+------------+--------+----------+--------+

| 1 | 2004-01-12 | 1001 | 30 | 25 |

| 2 | 2005-05-06 | 1202 | 34 | 24 |

| 3 | 2006-12-06 | 1220 | 10 | 22 |

| 4 | 2004-05-21 | 1233 | 12 | 21 |