**HANDS-ON**

Program 1:

CREATE TABLE WORLDCITY(city varchar,country varchar, continent varchar, latitude decimal, northsouth varchar, longitude decimal, eastwest varchar);

INSERT INTO WORLDCITY values('Athens','Greece','Europe',37.59,'N',23.44,'E');

INSERT INTO WORLDCITY values ('Atlanta','United States','North America',33.45,'N',84.45,'W');

INSERT INTO WORLDCITY values('Dallas','United States','North America',32.47,'N',96.47,'W');

INSERT INTO WORLDCITY values('Nashville','United States','North America',36.09,'N',86.46,'W');

INSERT INTO WORLDCITY values('Victoria','Canada','North America',48.25,'N',123.21,'W');

INSERT INTO WORLDCITY values('Peterborough','Canada','North America',44.18,'N',79.18,'W');

INSERT INTO WORLDCITY values('Toledo','United States','North America',41.39,'N',83.82,'W');

INSERT INTO WORLDCITY values('Warsaw','Poland','Europe',52.15,'N',21.00,'E');

INSERT INTO WORLDCITY values('Lima','Peru','South America',12.03,'S',77.03,'W');

INSERT INTO WORLDCITY values('Rio De Janeiro','Brazil','South America',22.43,'S',43.13,'W');

INSERT INTO WORLDCITY values('Santiago','Chile','South America',33.27,'S',70.40,'W');

INSERT INTO WORLDCITY values('Bogota','Colombia','South America',04.36,'N',74.05,'W');

INSERT INTO WORLDCITY values('Buenos Aires','Argentina','South America',34.36,'S',58.28,'W');

INSERT INTO WORLDCITY values('Quito','Ecuador','South America',00.13,'S',78.30,'W');

INSERT INTO WORLDCITY values('Caracas','Venezuela','South America',10.30,'N',66.56,'W');

INSERT INTO WORLDCITY values('Madras','India','Asia',28.36,'N',77.12,'E');

INSERT INTO WORLDCITY values('Bombay','India','Asia',18.58,'N',72.50,'E');

INSERT INTO WORLDCITY values('Manchester','England','Europe',51.30,'N',0.0,' ');

INSERT INTO WORLDCITY values('Moscow','Russia','Europe',55.45,'N',37.35,'E');

INSERT INTO WORLDCITY values('Paris','France','Europe',48.52,'N',2.20,'E');

INSERT INTO WORLDCITY values('Shenyang','China','Asia',41.48,'N',123.27,'E');

INSERT INTO WORLDCITY values('Cairo','Egypt','Africa',30.03,'N',31.15,'E');

INSERT INTO WORLDCITY values('Tripoli','Lybia','Africa',32.54,'N',13.11,'E');

INSERT INTO WORLDCITY values('Beijing','China','Asia',39.56,'N',116.24,'E');

INSERT INTO WORLDCITY values('Rome','Italy','Europe',41.54,'N',12.29,'E');

INSERT INTO WORLDCITY values('Tokyo','Japan','Asia',35.42,'N',139.46,'E');

INSERT INTO WORLDCITY values('Sydney','Australia','Australia',33.52,'S',151.13,'E');

INSERT INTO WORLDCITY values('Sparta','Greece','Europe',37.05,'N',22.27,'E');

INSERT INTO WORLDCITY values('Madrid','Spain','Europe',40.24,'N',3.41,'W');

SELECT DISTINCT country,city, continent FROM WORLDCITY GROUP BY country;

SELECT city, country FROM WORLDCITY WHERE city LIKE'R%';

SELECT city, country FROM WORLDCITY WHERE city LIKE'%e';

SELECT city, country FROM WORLDCITY WHERE city LIKE'M%' and LENGTH(city)== 6;

SELECT city, country FROM WORLDCITY WHERE city LIKE '\_a%';

Program 2:

create table Supplier(SupplierId int primary key, SName char(30), SCity varchar(30), SPhone numeric(10) not null,

Email varchar(50) unique);

insert into Supplier values(1, 'Dilip', 'Chennai', 8999900000, 'dilip@abc.co.in');

insert into Supplier values(2, 'Tarun', 'Madurai', 8999911111, 'tarun@xyz.com');

insert into Supplier values(3, 'Naresh', 'Coimbatore', 8999922222, 'g.naresh@xyz.com');

insert into Supplier values(4, 'Ganesan', 'Trichy', 8999933333, 'Ganesan\_83@ijk.com');

select \* from Supplier;

create table Customer (CustId int primary key, FName varchar(30), LName varchar(30), Address varchar(50),

PhoneNo numeric(10) not null, City varchar(20), Country varchar(20), DateFirstPurchased date, SupplierId int,

foreign key(SupplierId) references Supplier(SupplierId));

insert into Customer (CustId, FName, LName, Address, PhoneNo, City, Country, DateFirstPurchased, SupplierId) values

(1001, 'Das', 'Jayaseelan', '119,park Avenue, II street', 9841093428, 'Coimbatore', 'India', '2004-01-10' , 1),

(2001, 'Gopi', 'Govindraj', '241, I floor, Kamaraj street, Madippakkam', 9444124590, 'Chennai', 'India', '2005-03-25' , 4),

(1201, 'Dilip', 'Kishore', '43,II Avenue, Anna Nagar', 9997234534, 'Bangalore', 'India', '2004-08-20', 2),

(1300, 'Anand', 'Chowdhury', '42/1 sector 1, II street', 9841054348, 'Bangalore', 'India', '2005-05-15', 2),

(1220, 'Chandra', 'Nagarajan', '83, lal bagh', 9841067235, 'Bangalore', 'India', '2006-02-12', 4),

(1221, 'Abhishek', 'Kumar', '13, kishori park', 9444762390, 'Chennai' , 'India' , '2004-05-15', 1),

(1320, 'Nikhil', 'Pandit', '218, alwanya street', 9444892309, 'Salem', 'India', '2006-04-21', 3),

(1222, 'Meenu', 'Monica', 'C11, church road', 9841056342, 'Trichy', 'India', '2004-08-30', 1),

(1225, 'Pavan', 'Kumar', '128/A, North Mada Street', 9993478210, 'Madurai', 'India', '2004-08-18',4);

select \* from Customer;

create table Items(ItemId int primary key, ItemName varchar(35) not null, SupplierId int,

MinQTY numeric not null, MaxQTY numeric not null, Price numeric(5,2), foreign key (SupplierId) references Supplier(SupplierId));

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 (22, 'Ponds powder 400g', 3, 6, 25, 106.00);

insert into Items values (23, 'Reynolds pen- blue', 1, 10, 30, 15.00);

insert into Items values (24, 'Reynolds pen- black', 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 cream - 50g', 3, 5, 15, 55.00);

insert into Items values (27, 'Rexono deo spray', 2, 5, 20, 100.00);

insert into Items values (28, 'Dove soap', 4, 7, 15, 85.00);

Select \* from Items;

create table Orders(OrderId int primary key, OrderDate date, CustId int, Quantity int Check(Quantity > 0),

ItemId int, foreign key(ItemId) references Items(ItemId));

insert into Orders values(1, '2004-01-12', 1001, 30, 25);

insert into Orders values(2, '2005-05-06', 1202, 38, 24);

insert into Orders values(3, '2006-12-16', 1220, 10, 22);

insert into Orders values(4, '2004-05-21', 1233, 12, 21);

Select \* from Orders;

SELECT \* FROM Customer WHERE City='Chennai';

SELECT \* FROM Customer CustId, FName, LName WHERE DateFirstPurchased > '2005-01-01';

SELECT \* FROM Customer WHERE Supplier=2;

SELECT \* FROM Supplier WHERE SCity='Coimbatore';

SELECT \* FROM Supplier WHERE SName='G%';

SELECT \* FROM Customer WHERE LName='%e%';

SELECT \* FROM Customer WHERE DateFirstPurchased >='2006-01-01' and DateFirstPurchased <'2006-12-31' orderby DateFirstPurchased desc;

SELECT \* FROM ORDERS WHERE Quantity >35;

SELECT \* FROM ITEMS WHERE SupplierId=4;

SELECT \* FROM ITEAMS WHERE SupplierId =3 and MinQTY >3 orderby ItemId;

SELECT MAX(Price) AS Maxprice FROM ITEMS;

SELECT Price FROM ITEMS WHERE ItemId=(SELECT ItemId FROM ORDERS WHERE Quantity=MIN(Quantity) );

Select FName, City, Country from Customer where City='Chennai' or City='Salem' or City='Madurai';

Select \* from Orders where ItemId = (Select ItemId from Items where ItemName like 'Dove Soap');

Select \* from Orders, Items

where Orders.ItemId = (Select Items.ItemId from Items where Items.ItemName like 'Dove Soap')

and Items.ItemId = (Select Items.ItemId from Items where Items.ItemName like 'Dove Soap');