**1.Create a table “Station” to store in formation about weather observation stations:**

create table Station

(ID number primary key,

city char(20),

state char(2),

lat\_n number,

long\_w number);

**2. Insert the following records into the table:**

insert into Station values (13,'PHOENIX','AZ',33,112);

insert into Station values (44,'DENVER','CO',40,105);

insert into Station values (66,'CARIBOU','ME',47,68);

**3. Execute a query to look at table STATION in undefined order:**

select \* from Station;

**4. Execute a query to select Northern stations (Northern latitude > 39.7).**

select \* from Station

where lat\_n>39.7;

**5. Create another table, ‘STATS’, to store normalized temperature and precipitation data:**

create table STATS

(ID number,

Month number check(Month between 1 and 12),

TEMP\_F number check(TEMP\_F between -80 and 150),

RAIN\_I number check(RAIN\_I between 0 and 100),

foreign key(ID) references Station(ID)

);

**6. Populate the table STATS with some statistics for January and July:**

insert into STATS values (13,1,57.4,0.31);

insert into STATS values (13,7,91.7,5.15);

insert into STATS values (44,1,27.3,0.18);

insert into STATS values (44,7,74.8,2.11);

insert into STATS values (66,1,6.7,2.1);

insert into STATS values (66,7,65.8,4.52);

**7. Execute a query to display temperature stats (from STATS table) for each city (from Station table).**

select TEMP\_F,city from STATS inner join Station on Stats.ID=Station.ID;

**8. Execute a query to look at the table STATS, ordered by month and greatest rainfall, with columns rearranged. It should also show the corresponding cities.**

select month,RAIN\_I,city from STATS inner join Station on stats.ID=station.ID order by month desc,RAIN\_I desc;

**9. Execute a query to look at temperatures for July from table STATS, lowest temperatures first, picking up city name and latitude.**

select month,TEMP\_F,city,lat\_N from STATS inner join Station on STATS.ID=Station.ID

where month=7 order by temp\_f;

**10. Execute a query to show MAX and MIN temperatures as well as average rainfall for each city:**

select avg(rain\_I),max(temp\_F),min(temp\_F),city from STATS inner join station

on stats.ID=Station.ID group by city;

**11. Execute a query to display each city’s monthly temperature in Celcius and rainfall in Centimeter.**

select city,(temp\_F-32)\*5/9 as temp\_cel,rain\_I\*2.54 as rain\_cm from Stats inner join station on stats.ID=station.ID;

**12. Update all rows of table STATS to compensate for faulty rain gauges known to read 0.01 inches low.**

update STATS

set rain\_I=rain\_I+0.01;

**13. Update Denver's July temperature reading as 74.9:**

update (select temp\_F,city,month from stats inner join station on stats.ID=station.ID)

set temp\_f=74.9

where city='DENVER' and month=7;