

Programme	:	B.Tech	Semester	:	Winter 2018-19
Course Title	:	<b>Database Management Systems Lab</b>	Code	:	CSE2004
			Class Nbr	:	
Date	:	11/12/2019	Week & Slot	:	2 & L55+L56

## 1. Weather Database

A. Create a table named as **Station** to store information about weather observation with the following fields and constraints.

Station (ID INTEGER, CITY STRING, STATE STRING, LAT\_N INTEGER, LONG\_E INTEGER)

Note: No duplicate ID fields allowed

B. Populate the table STATION with the following records:

ID	CITY	STATE	Longitude		
10	CITI	SIAIE	LAT_N	LAT_E	
13	AMRITSAR	CHANDIGARH	31	74	
14	JAIPUR	RAJASTAN	26	75	
15	LUCKNOW	UTTAR PRADESH	26	80	
16	PATNA	BIHAR	25	85	
17	BHUBANESHWAR	ODISSA	20	85	
18	MUMBAI	MAHARASHTRA	19	72	
19	HYDERABAD	ANDHRA PRADESH	17	78	
20	CHENNAI	TAMILNADU	13	80	
21	BANGALORE	KARNATAKA	12	74	
22	TIRUVANTHAPURAM	KERALA	12	77	

C. Create another table named as  ${f stats}$  to store normalized temperature and precipitation data

STATS (ID INTEGER, MONTH INTEGER, TEMP\_C REAL, RAIN\_I REAL);

- -- ID field must match some STATION table ID (so name and location will be known).
- -- No duplicate ID and MONTH (Min: 1 Max: 12) combinations.
- -- Temperature is in degrees Centigrade (Min: -0 Max: 100).
- -- Rainfall is in mm (Min: 0 Max: 300).
- D. Populate the table STATS with some statistics for January and July:

ID	MONTH	TEMP_C	RAIN_I
13	1	18	0
14	1	18	0
15	1	18	0
16	1	18	0
17	1	16	0
18	1	20	0
19	1	27	0
20	1	27	0
21	1	28	0
22	1	25	0
13	7	26	100
14	7	23	150
15	7	25	140
16	7	26	180
17	7	28	130

G. Populate your own records for checking all the constraints.

## 2. Create the Campus Cafeteria Database with the given Tables & Constraints.

**Campus** (CampusID, CampusName, Street, City, State, Zip, Phone, CampusDiscount)

**Position** (<u>PositionID</u>, Position, YearlyMembershipFee)

**Members** (MemberID, LastName, FirstName, CampusAddress, CampusPhone, CampusID, PositionID, ContractDuration) **FK** CampusID --> Campus(CampusID), PositionID --> Position(PositionID)

**Prices** (FoodItemTypeID, MealType, MealPrice)

**FoodItems** (<u>FoodItemID</u>, FoodItemName, FoodItemTypeID) **FK** FoodItemTypeID --> Prices(FoodItemTypeID)

**Orders** (OrderID, MemberID, OrderDate) **FK** MemberID --> Members(MemberID)

**OrderLine** (OrderID, FoodItemsID, Quantity) **FK** OrderID --> Orders(OrderID)

## Note:

Underline indicates Primary Key. First create tables without constraints and then add specified Constraints.

Use the proper naming convention for your constraints:

**Example**: Constraint TableName\_FieldName\_ConstraintID (Campus\_CampusID\_PK)

Make the Data Type for OrderDate as date.

Make the Data Types for the MealPrice and YearlyMembershipFee Decimal, 7 digits maximum with 2 digits to the right of the decimal place.

Make the Data Types for ContractDuration, and Quantity Integer with 3 digits maximum.

Make the Data Type for CampusDiscount Decimal, 2 digits maximum with 2 digits to the right of the decimal place.