RDBMS Question Set - Question 1

After 3NF

- 1. StudentDetails{Name, Class, Section, dateofbirth, StudentAddressID, studentphone, blood group, email}
- 2. ClassDetails{Class, Section, RoomNumber, ClassStrength, TeacherName}
- 3. TeacherDetails{Name, Phone, AddressID}
- 4. Address(AddressID, DoorNo, StreetName, City)
- **5.** Cities(City, PinCode)

Guidelines:

- 1. Create the tables by **choosing the right datatype** for each field. **Justify** your datatype selection with explanation.
- 2. Enforce integrity constraints by adding **Row and Column Level** Constraints as necessary.
- 3. Add every constraint with a **name** and follow a **proper naming convention** for naming tables, fields and constraints.
- 4. Use alter command to add constraints separately with proper names.
- 5. Add **meaningful sample data** to all the tables so that, you can utilise them for building an application.
- 6. Create a **database diagram highlighting the references** or foreign key connections clearly.
- 7. Don't use the GUI table designer. Create the tables by writing code to ensure reuse and reliability.

Do the same for the below questions as well after normalizing them

Normalize the following Databases and write the 1NF, 2NF and 3NF forms separately and provide justification for the assumptions and decisions made. Furnish other details as required.

2. Staff(Staff Name, Designation, Experience, Join Date, Date of Birth, Address, Phone, Email, Department Name, DeptStrength, DeptPhone, HOD, HodPhone, DeptAddress)

(Assume that not more than one staff will have the same name in a department)

3. Employee(Name, Department, DateofBirth, Experience, Join date, Designation, Phone, DeptPhone, DeptStrength, Project, Qualification, Skill Set, Training Attended, Manager Name, Manager Age, Manager Phone)

(Assume that not more than one employee will have the same name in the same department under the same manager)