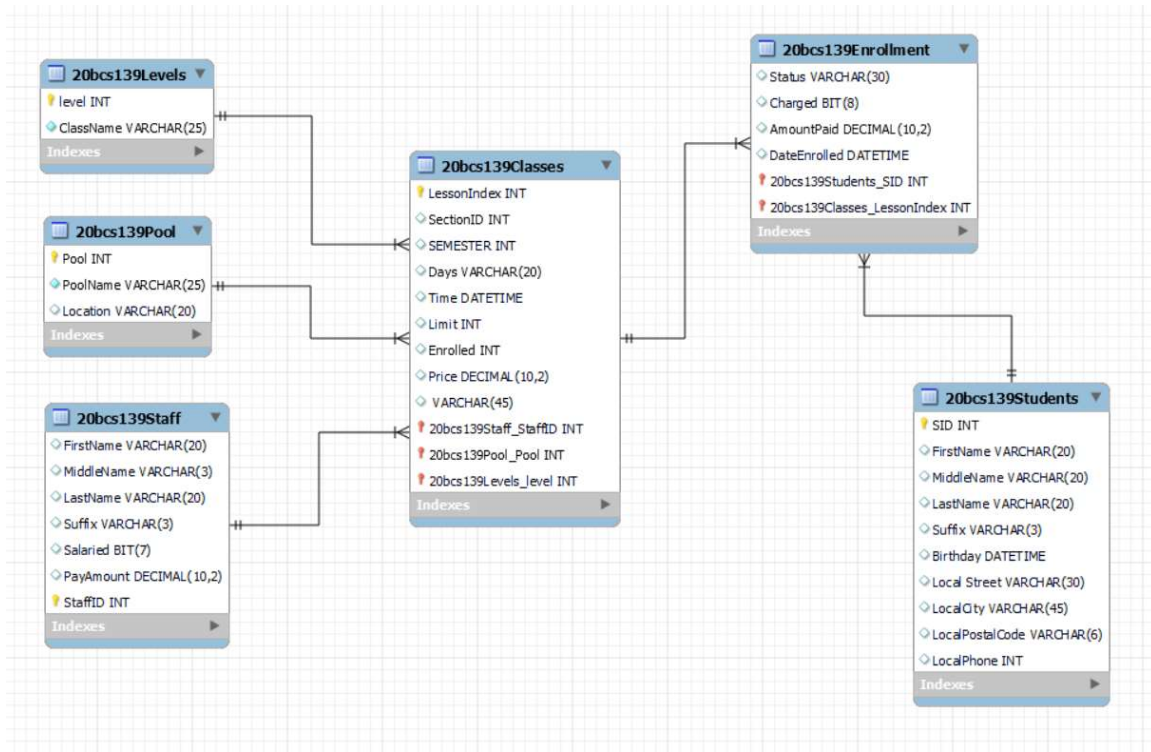


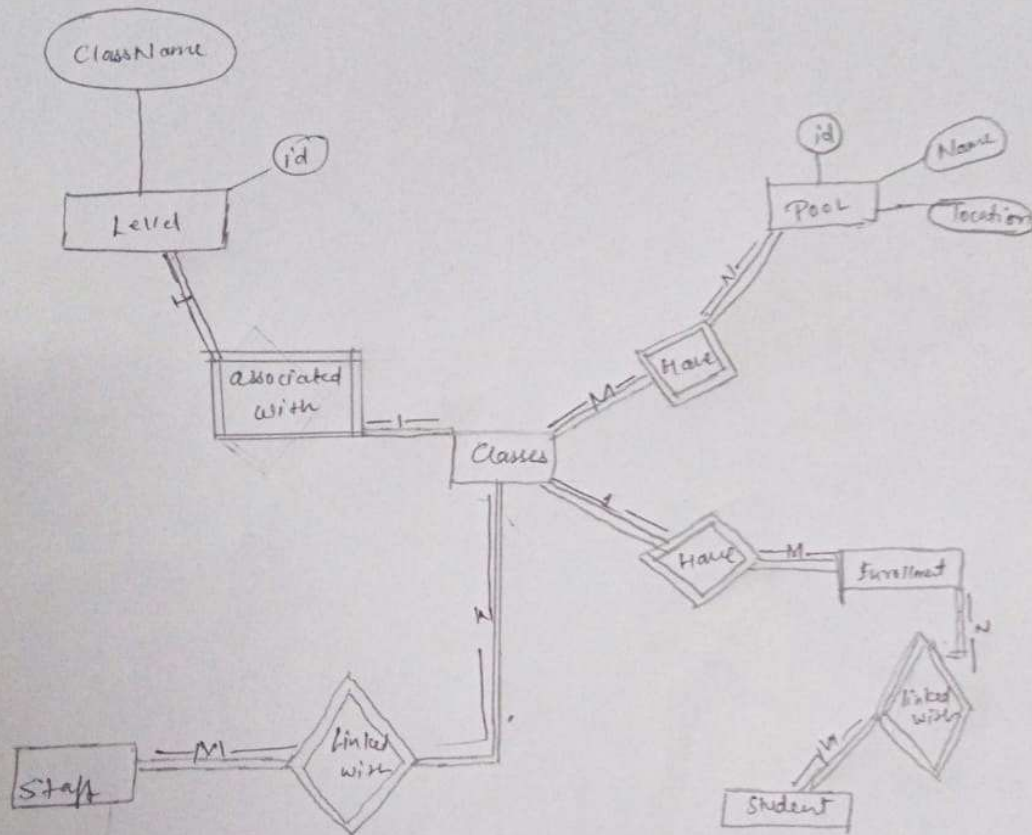
CONCEPTUAL DATA MODEL



1. Crow -Foot technique used
2. Key type described
3. Total; six tables used

SCHEMA DIAGRAM

Scheme Diagram



1. Only 1 level will be associated with a class.
2. Atleast 1 Pool will be linked with 1 class.
3. Staff may or may not be linked with a class.
4. Classes have enrolled students.
5. Students have enrolled with atleast 1 class

CARDINALITY

The screenshot shows a 'Relationship' configuration window. It defines a relationship between two tables:

- Referencing Table:** 20bcs139Classes. It includes a foreign key 'fk_20bcs139Classes_20bcs139Levels1' and a field '20bcs139Levels_level: INT (PK)'. The 'Mandatory' checkbox is checked.
- Cardinality:** The 'One-to-Many (1:n)' option is selected. There is an 'Invert Relationship' button.
- Referenced Table:** 20bcs139Levels. It includes a field 'level: INT (PK)'. The 'Mandatory' checkbox is checked.

Additional options include 'Identifying Relationship' (checked) and 'Edit Table...' buttons for both tables.

Relationship x

Referencing Table
20bcs139Classes
Foreign Key: fk_20bcs139Classes_20bcs139Pool1
20bcs139Pool_Pool: INT (PK)

Cardinality
☐ One-to-One (1:1)
☒ One-to-Many (1:n)
Invert Relationship

Referenced Table
20bcs139Pool
Pool: INT (PK)

☒ Mandatory Edit Table...

☒ Identifying Relationship

☒ Mandatory Edit Table...

Relationship x

Referencing Table
20bcs139Classes
Foreign Key: fk_20bcs139Classes_20bcs139Staff1
20bcs139Staff_StaffID: INT (PK)

Cardinality
☐ One-to-One (1:1)
☒ One-to-Many (1:n)
Invert Relationship

Referenced Table
20bcs139Staff
StaffID: INT (PK)

☒ Mandatory Edit Table...

☒ Identifying Relationship

☒ Mandatory Edit Table...

Relationship x

Referencing Table
20bcs139Enrollment
Foreign Key: fk_20bcs139Enrollment_20bcs139Students
20bcs139Students_SID: INT (PK)

Cardinality
☐ One-to-One (1:1)
☒ One-to-Many (1:n)
Invert Relationship

Referenced Table
20bcs139Students
SID: INT (PK)

☒ Mandatory Edit Table...

☒ Identifying Relationship

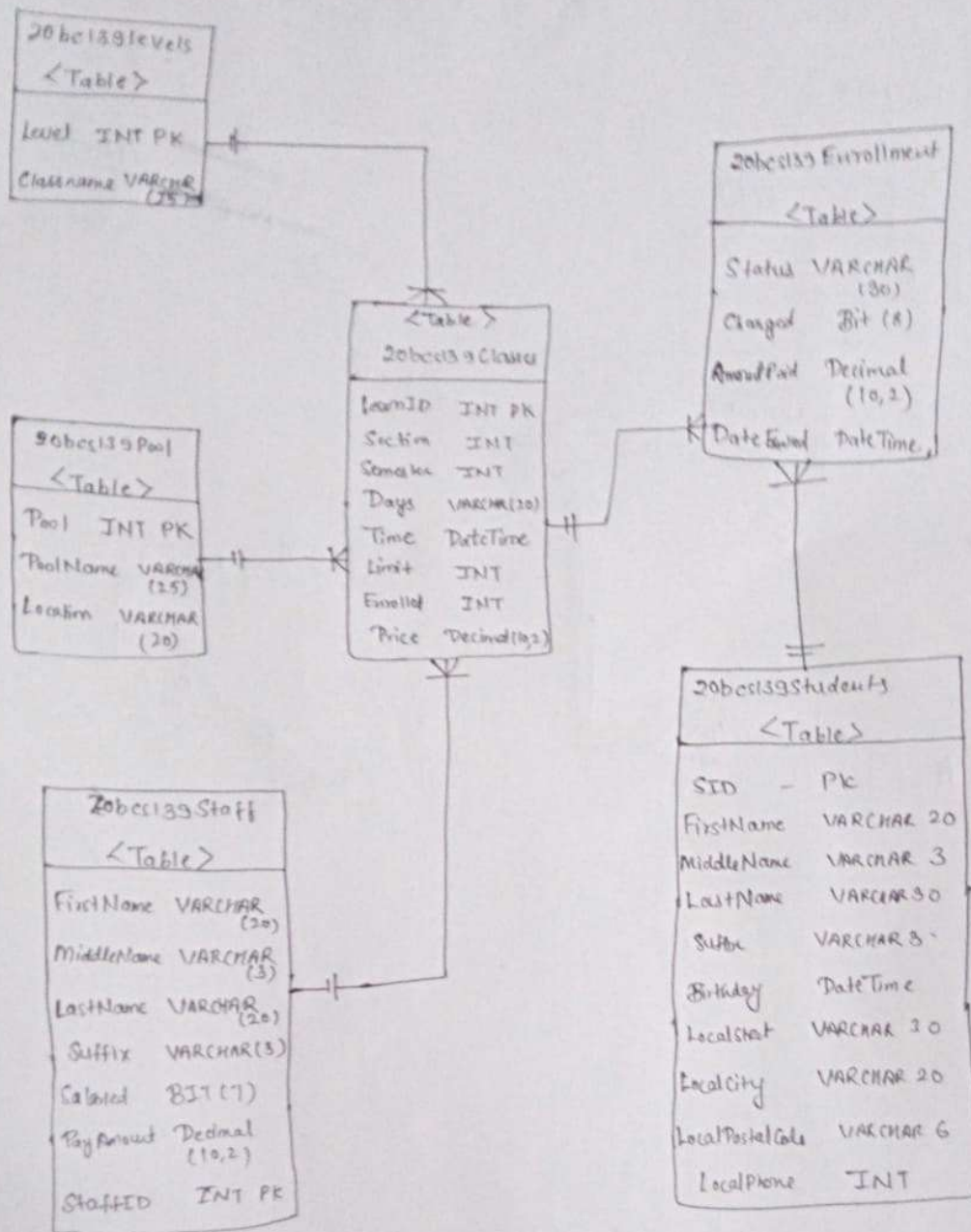
☒ Mandatory Edit Table...

Relationship x

Referencing Table 20bcs139Enrollment Foreign Key: fk_20bcs139Enrollment_20bcs139Class 20bcs139Classes_LessonIndex: INT (FK)	Cardinality <input type="radio"/> One-to-One (1:1) <input checked="" type="radio"/> One-to-Many (1:n) Invert Relationship	Referenced Table 20bcs139Classes LessonIndex: INT (PK)
<input checked="" type="checkbox"/> Mandatory Edit Table...	<input checked="" type="checkbox"/> Identifying Relationship	<input checked="" type="checkbox"/> Mandatory Edit Table...

Physical Database Model

Physical Data Model



WEAK AND STRONG ENTITY

Enrollment is weak entity because it has no primary key and depends on SID