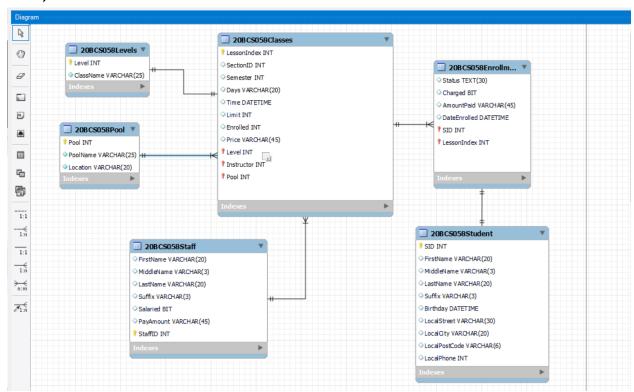
#### 20BCS058

#### **Hemant Dhawale**

# Q.1)



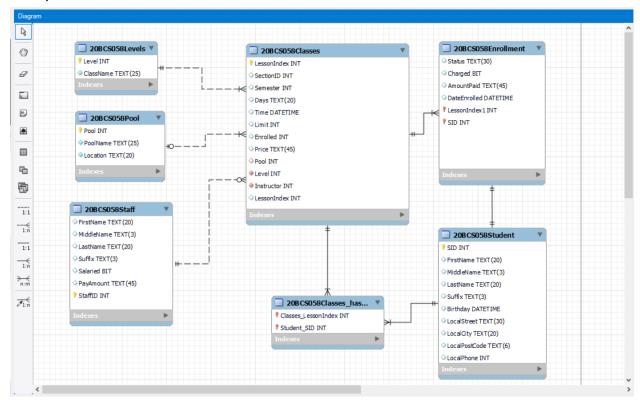
### **Description:**

- Each level must have one class.
- Multiple classes can have the same pool.
- Each staff member can handle multiple classes.
- Each class can have multiple enrollment.
- One student must have only one enrollment.

## Q.2) Degree and Cardinality:

20BCS058Levels	[one to one]	20BCS058Classes
20BCS058Pools	[one to many]	20BCS058Classes
20BCS058Staff	[one to many]	20BCS058Classes
20BCS058Enrollment	[many to one]	20BCS058Classes
20BCS058Enrollment	[one to one]	20BCS058Students

# Q.3)

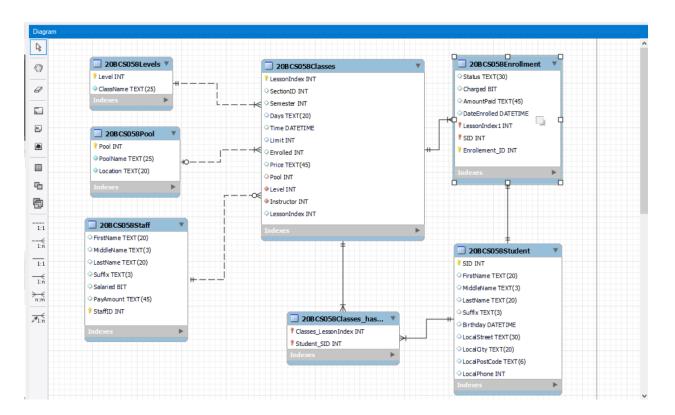


# **Description:**

- A pool may or may not ever have a class.
- The levels table must always be associated with at least one class.
- The staff table may not ever have taught a class.

- The class must have students enrolled in it.
- The class must have a valid pool.
- The class may not have an instructor assigned.
- The class must have always be associated with an existing level.

Q.4) Weak entity: **20BCS058Enrollment** is the weak entity as it depends on **20BCS058Classes and 20BCS058Student**. It can be converted to a strong entity by adding a primary key. There should be a primary key with the name "**Enrollment\_ID**" so that it can be converted into strong entity.



Q.5)There is no redundancy in DataBases.