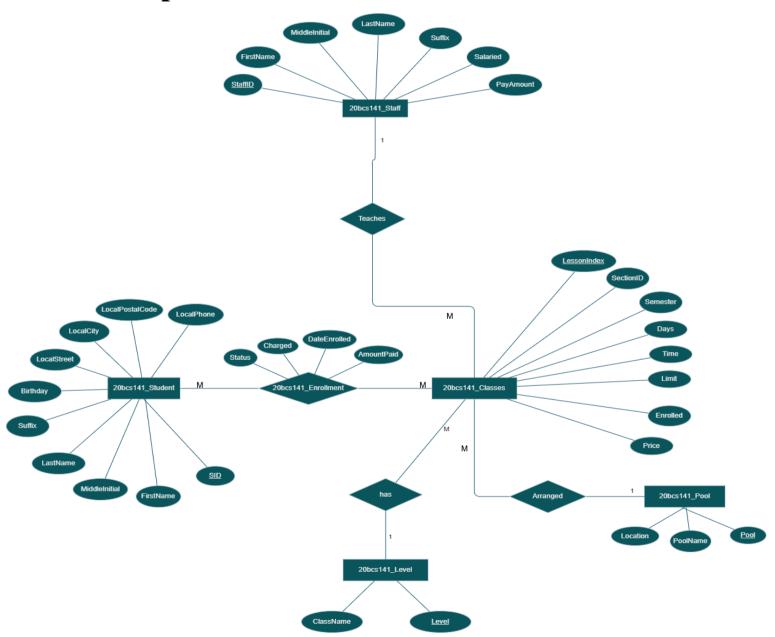Name – Yuvraj Singh

Roll no. – 20BCS141
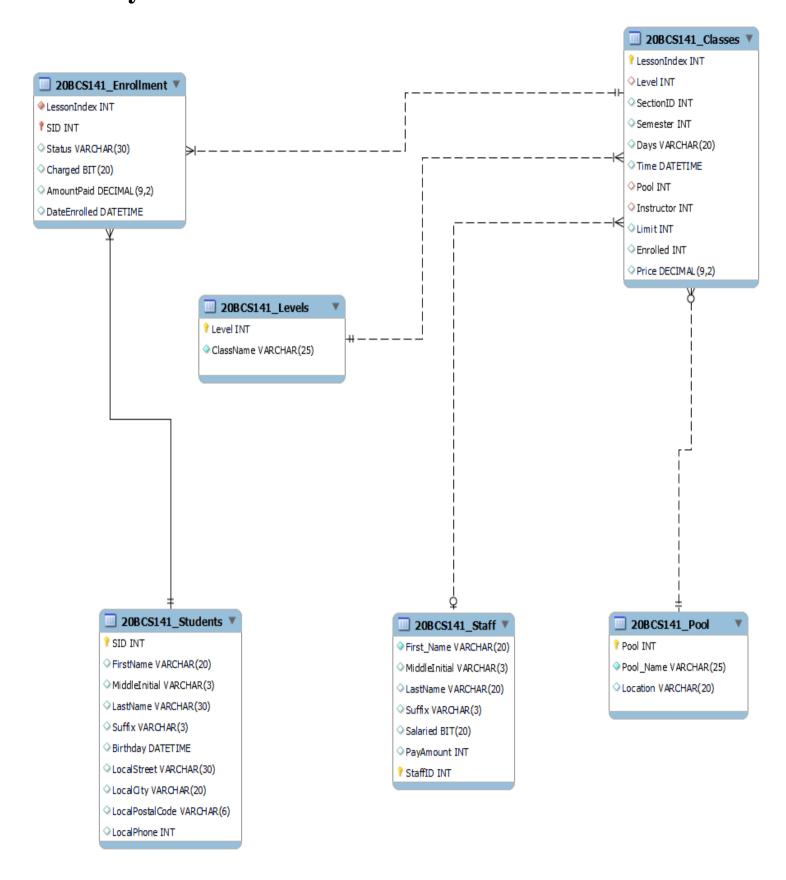
DBMS (CS310)
CLASS HACKATHON

Date – 04-02-2022

Conceptual Data Model –

Physical Data Model –

20BCS141_Classes
- 🔑 LessonIndex INT
- 🔶 Level INT
- 🔷 SectionID INT
- 🔷 Semester INT
- 🔷 Days VARCHAR(20)
- 🔷 Time DATETIME
- 🔶 Pool INT
- 🔶 Instructor INT
- 🔶 Limit INT
- 🔷 Enrolled INT
- 🔷 Price DECIMAL(9,2)

20BCS141_Enrollment
- 🔶 LessonIndex INT
- 🔑 SID INT
- 🔷 Status VARCHAR(30)
- 🔷 Charged BIT(20)
- 🔷 AmountPaid DECIMAL(9,2)
- 🔷 DateEnrolled DATETIME

20BCS141_Levels
- 🔑 Level INT
- 🔷 ClassName VARCHAR(25)

20BCS141_Students
- 🔑 SID INT
- 🔷 FirstName VARCHAR(20)
- 🔷 MiddleInitial VARCHAR(3)
- 🔷 LastName VARCHAR(30)
- 🔷 Suffix VARCHAR(3)
- 🔷 Birthday DATETIME
- 🔷 LocalStreet VARCHAR(30)
- 🔷 LocalCity VARCHAR(20)
- 🔷 LocalPostalCode VARCHAR(6)
- 🔷 LocalPhone INT

20BCS141_Staff
- 🔷 First_Name VARCHAR(20)
- 🔷 MiddleInitial VARCHAR(3)
- 🔷 LastName VARCHAR(20)
- 🔷 Suffix VARCHAR(3)
- 🔷 Salaried BIT(20)
- 🔷 PayAmount INT
- 🔑 StaffID INT

20BCS141_Pool
- 🔑 Pool INT
- 🔷 Pool_Name VARCHAR(25)
- 🔷 Location VARCHAR(20)

- There is only one weak entity in this model i.e "20BCS141_Enrollment" because it does not have a Primary Key of its own, but has 2 Foreign Keys taken together as its Primary Key. Therefore, the entity's existence depends on the existence of the other 2 entities. Other all entities are strong.

- There is no data redundancy occurring in this model. All the tables have the necessary and relevant information stored in them, and where there is a need, foreign keys are made use to reference data in other relations.