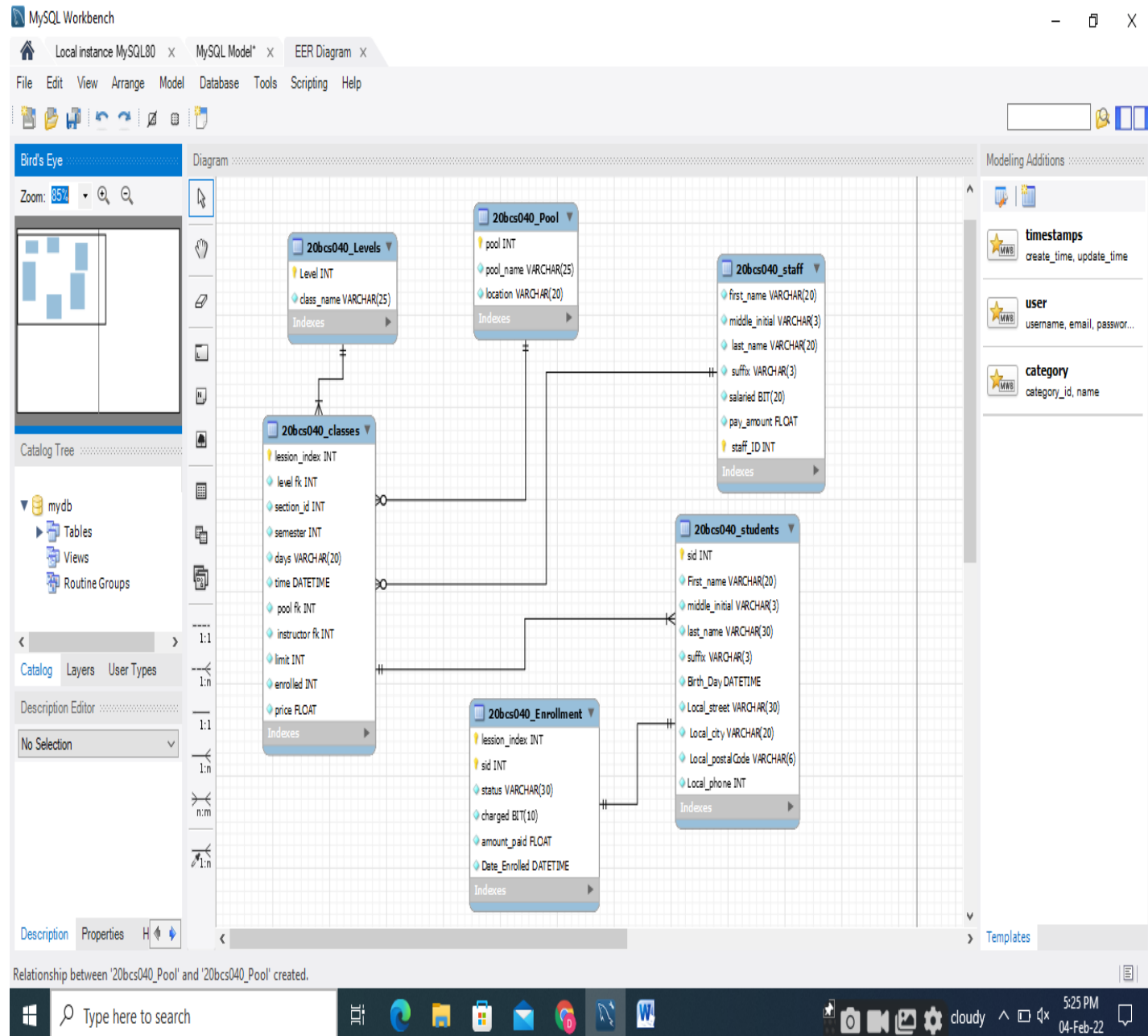


Name:- Dhanisht Kumar (20bcs040)

Course:- DBMS

ERD:-



- There is six relations in the existing ERD
- From the 'Classes' relation prespective, there is 'many to one' relationship between the classes and levels It means that each level associated with atleast one class
- There is many to one relationship between classes and pool relation with no mandatory condition, it means that a pool may not have a class.
- Similarly, there is 'many to one' relationship between classes and staffs table with no mandatory condition, it means that a staff may not taught a class.
- There is 'one to many' relationship between classes and students with mandatory condition, it means that students must be enrolled in at least one class.
- There is 'one to one' relationship between student and enrollment table with mandatory condition, each student must be enrolled for the course.
- **Different Keys:-**
- I've made the 'level' , 'pool' , 'insturctor' as a FK in referencing table "20bcs040_Classes" and level is in referenced table "Levels" , pool is in referenced table "20bcs040_Pool" and instructor is in referenced table "20bcs040_staffs" as a null.
- **Weak Entities:-**
'20bcs040_Pool' is a weak entity
 - **Schemas:-**
 1. 20bcs040_Levels(Level(PK), classsName)
 2. 20bcs040_pool(Pool(PK), PolName, Location)
 3. 20bcs040_staff(FirstName, Middle initial, LastName, suffix, salaried, pay_amount., staff_id(pk))

4. 20bcs040_classes(lesion_index(pk), level, section_id, semester, days, time, pool, instructor, limit, enrolled, price)
5. 20bcs040_Enrollment(LessonIndex(pk), SID(pk), Status, charged, AmountPaid, Date_enrolled) **In this schema PK defined as a combination of two Key**
6. 20bcs040_students(SID (PKP, firstName, MiddleName, LastName, suffix, DOB, LocalStreet, LocalCity, LocalPostal_Code, Local_PhoneNo)