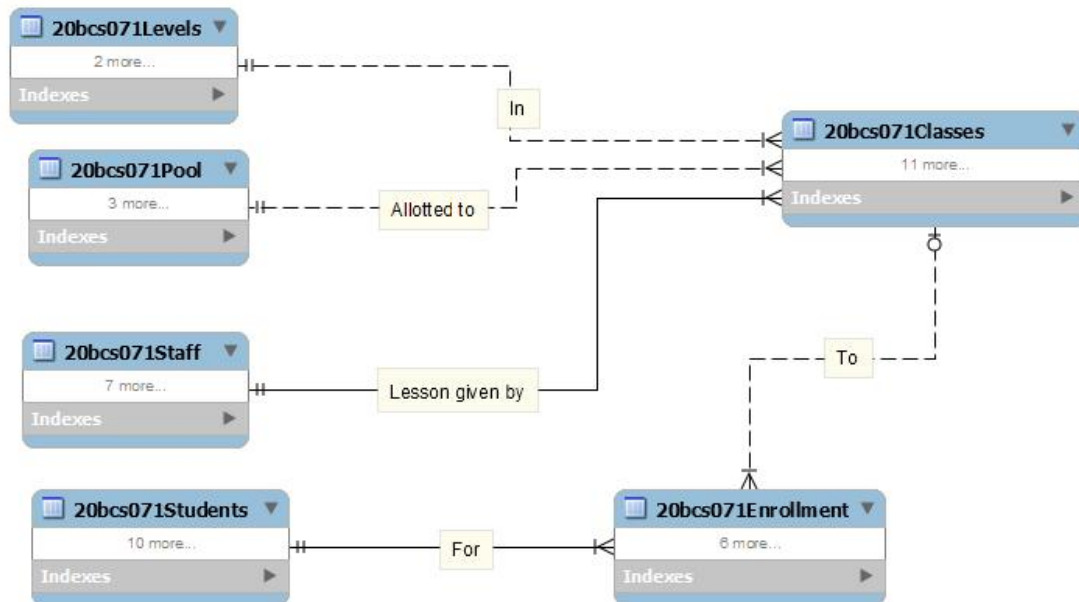


DBMS

Name-Khushi G K
Roll No.-20BCS071

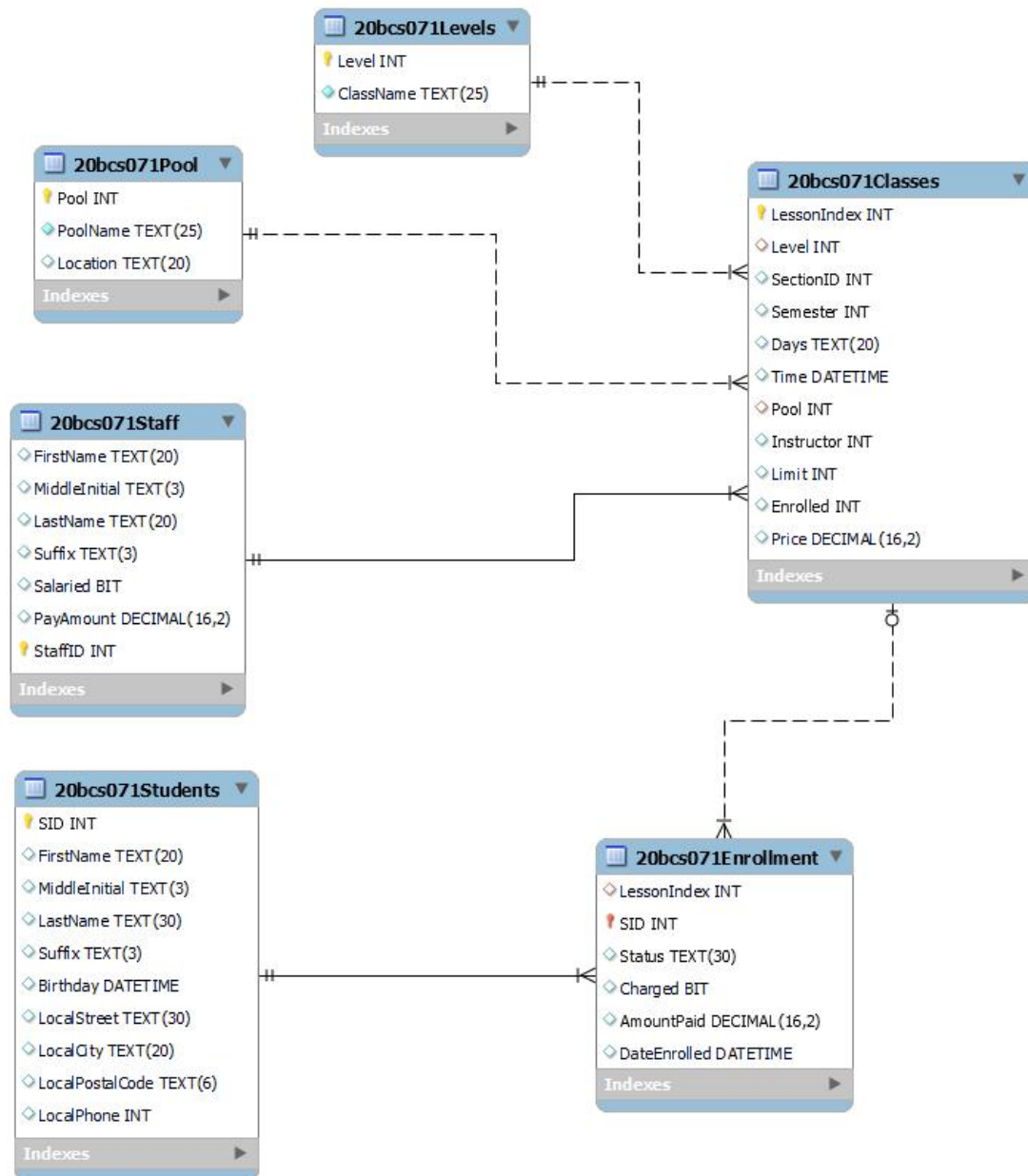
Conceptual
Model:



All the relationships in the above ERD diagram are binary relationships. The cardinality of these relationships is as follows: • Students-Enrollment : One to Many

- Enrollment-Classes: Many to One
- Classes-Staff: Many to One
- Classes-Pool: Many to One
- Classes-Level: Many to One

Physical Model:



Code:

```
CREATE TABLE 20bcs071Levels(
Level INTEGER PRIMARY KEY,
ClassName TEXT(25) NOT NULL);
```

```
CREATE TABLE 20bcs071Pool(
Pool INTEGER PRIMARY KEY,
ClassName TEXT(25) NOT NULL,
Location TEXT(20));
```

```
CREATE TABLE 20bcs071Staff(
StaffID INTEGER PRIMARY KEY,
FirstName TEXT(20),
MiddleInitial TEXT(3),
LastName TEXT(20),
```

Suffix TEXT(3),
Salaried BIT,
PayAmount INTEGER);

CREATE TABLE 20bcs071Students(
SID INTEGER PRIMARY KEY,
FirstName TEXT(20),
MiddleInitial TEXT(3),
LastName TEXT(30),
Suffix TEXT(3),
Birthday DATETIME,
LocalStreet TEXT(30),
LocatCity TEXT(20),
LocalPostalCode TEXT(6),
LocalPhone INT);

CREATE TABLE 20bcs071Classes(
LessonIndex INTEGER PRIMARY KEY,
Level INTEGER,
SectionID INTEGER,
Semester INT,
Days TEXT(20),
Time DATETIME,
Pool INTEGER,
Instructor INTEGER,
ClassLimit INT,
Enrolled INT,
Price INTEGER,

FOREIGN KEY (Level) REFERENCES 20bcs071Levels(Level),
FOREIGN KEY (Pool) REFERENCES 20bcs071Pool(Pool),
FOREIGN KEY (Instructor) REFERENCES 20bcs071Staff(StaffID));

CREATE TABLE 20bcs071Enrollment(
LessonIndex INTEGER,
SID INTEGER PRIMARY KEY,
Status TEXT(30),
Charged BIT,
AmountPaid INTEGER,
DateEnrolled DATETIME,

CONSTRAINT Enrollment_FK1 FOREIGN KEY (SID) REFERENCES 20bcs071Classes(LessonIndex),
CONSTRAINT Enrollment_FK2 FOREIGN KEY (SID) REFERENCES 20bcs071Students(SID));