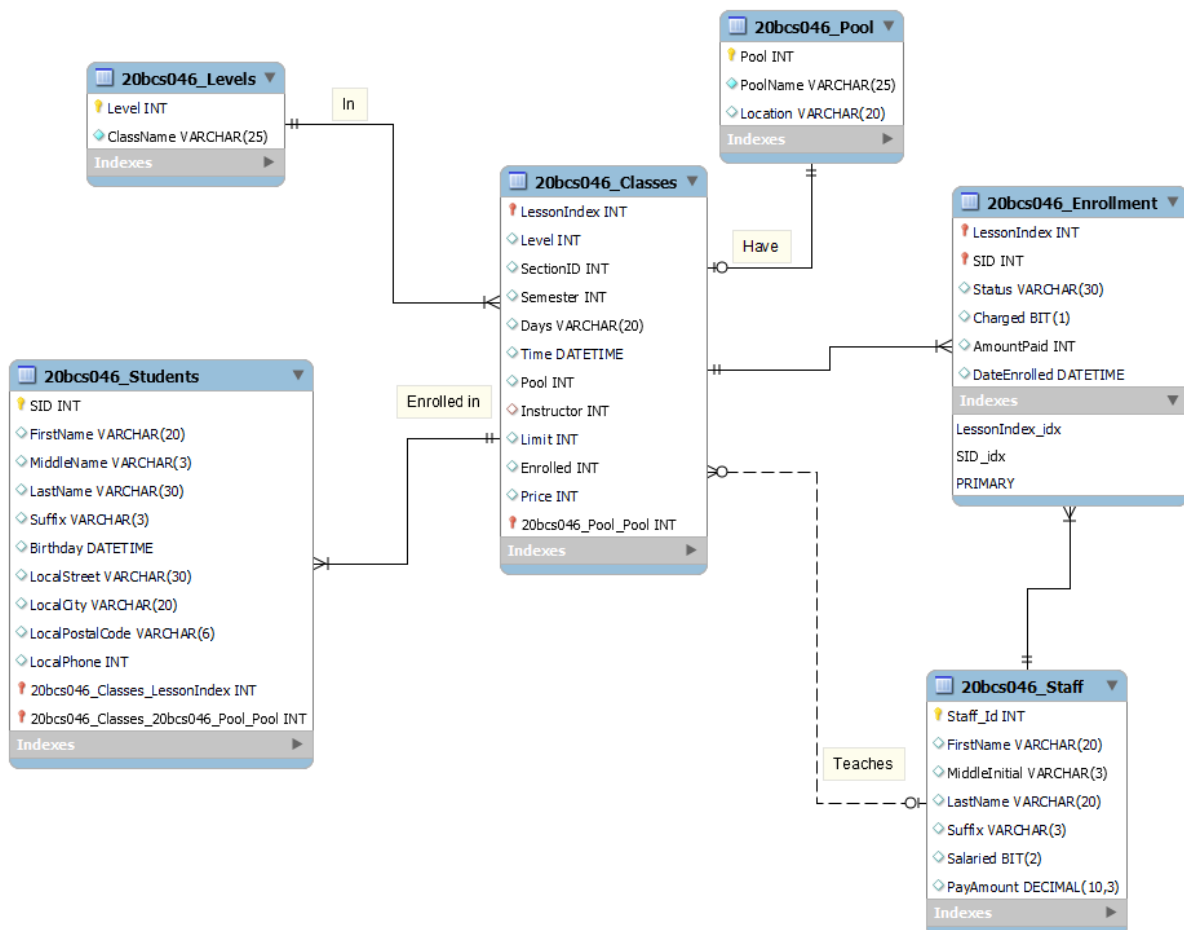


Physical data model

The following conditions are satisfied in ER Diagram:

- 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 have ever taught a class.
- All students must be enrolled in at least one 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 always be associated with an existing level.



Q4:-There are no weak entities in the Physical Data model since Students, Staff, Levels, Pool, Classes have a primary key and Enrollment has a composite primary key of SID and LessonIndex.

Q5:-In enrollment and classes there is attribute Price and Amount paid represents same that is the amount paid by the student for class so here an attribute is repeated in a different table thus we have data redundancy issue