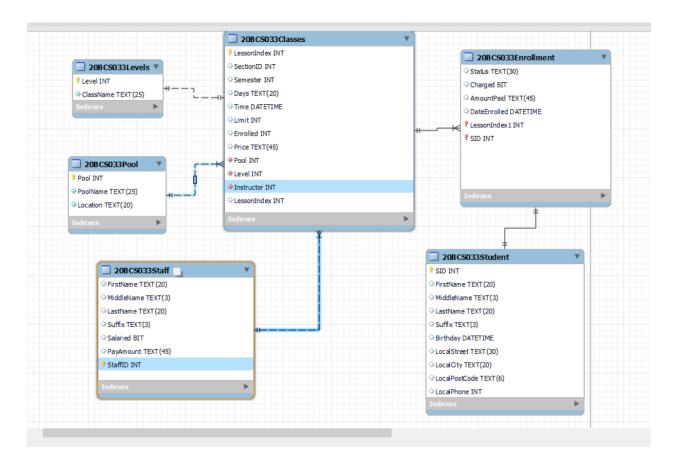
Question-1



Description:

- One level Students must have one class.
- One staff member can handle multiple classes.
- One student Swimmer must have only one enrollment.
- Multiple classes can be conducted in the same pool.
- One class can have multiple enrollment numbers.

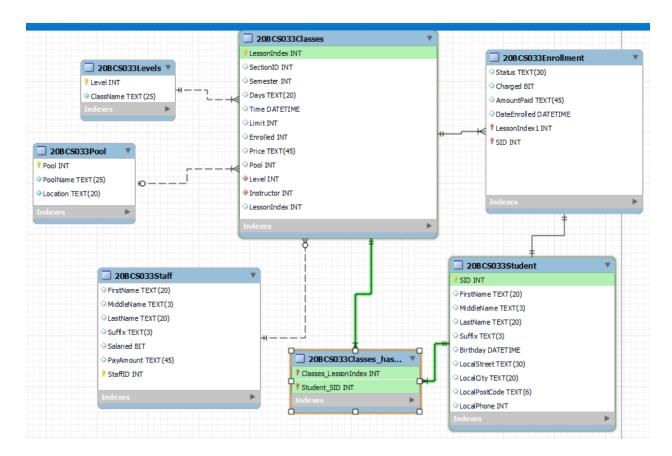
Question-2

Ans:

20BCS033levels	[one to one]	20BCS033Classes
20BCS033pools	[one to many]	20BCS033Classes
20BCS033staff	[one to many]	20BCS033Classes
20BCS033enrollment	[many to one]	20BCS033Classes
20BCS033enrollment	[one to one]	20BCS033Students

Degree of 20BCS030Levels = 2
Degree of 20BCS030Pools = 3
Degree of 20BCS030Staff = 7
Degree of 20BCS030Enrollment = 6
Degree of 20BCS030Classes = 11
Degree of 20BCS030Students = 10

Question-3

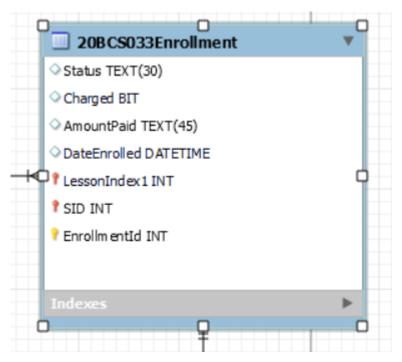


Description:

- 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 been associated with an existing level.

Question-4

Ans: The Weak entity in our Physical data model is 20BCS033Enrollment Table because it contain foregin key as primary key (like SID, LessonIndex). To make that entity strong entity we we can create a new primary key like EnrollmentId



Question-5

Ans: In this Physical Data model no data redundancy is possible.