Database Unit 05 – Inner & Outer Joins

 Chapter 04 - Retrieve Data From Two or More Tables

**College Database:**

Foreign Key: key to a record in another table; major ID number is referenced in the student table instead of referencing the actual name of the major

Primary Key: uniquely identifies

Null: missing data; no data

**EER Diagrams:**

Schema: another word for design

* College Schema is the design of the college database

**INNER JOIN:** ( SELECT LastName, FirstName, student.MajorID )

* Join together info from two tables; based on relationship between the tables

Ex. // SELECT LastName, FirstName, Major.Name

FROM student

INNER JOIN

major ON major.ID = student.MajorID

( Joins the major table to student ON the major field = student field )

\*\*This excludes students with a major of null

**MULTIPLE TABLE JOINS:**

**OUTER JOINS:**

* Brings in all rows from a table even if there’s no match on the other side of the relationship

Ex. // FROM Faculty INNER JOIN

Section ON section.TaughtByID = faculty.ID

Joins faculty and section table via the given fields

Ex. // FROM faculty LEFT OUTER JOIN

Section ON Section.TaughtByID = faculty.ID

* Includes faculty records that don’t have a section

// WHERE Section.ID IS NULL 🡪 shows faculty who don’t have any sections