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**Lab 07**

**Primary key:**

StudentID (Students): Every student in the student table has a unique ID that gives each student a unique identity that’s why it’s a primary key.

CourseID (Courses): Every course in the course table has a unique course ID that give it a unique identity that’s why it’s a primary key.

InstructorID (Instructor): Every instructor in the instructor table has a unique ID that’s why it’s a primary key.

**Composite key:**

There is no composite key that’s directly defined in this schema. But if we were to extend the design e.g. in a table storing course enrollments then a composite key could be made up of StudentID and CourseID.

**Foreign key:**

CourseID (Students): Since it’s another table’s primary key and is used in this table because there is a relationship between these tables that is why it’s a foreign key.

InstructorID (Courses): It is the foreign key because it references the primary key of the instructor table linking each course to it’s instructor.

**Candidate key:**

StudentID: StudentID can uniquely identify students.

Email (Students): Email can uniquely identify students.

InstructorID: InstructorID can uniquely identify instructor of a course.

Email (Instructors): Email can uniquely identify instructor of a course.

**Super key:**

StudentID

FirstName

Email (Students)

All these can uniquely identify the student. StudentID alone can uniquely identify each student so it is also a super key on it’s own.

**Unique key:**

Email (Instructors): It’s a unique key in the instructor table because each instructor’s email address must be unique.

**Alternate key:**

Email (Students): In the Student table email is an alternate key because it is a candidate key but not a primary key.