

# Homework-1

**Laser Ayyıldız - 05160000562**

**1- List possible primary keys for each table.**

- STUDENT.Student\_number
- COURSE.Course\_number
- SECTION.Section\_identifier
- PREREQUISITE.Prerequisite\_number
- STUDENT.Name
- STUDENT.Class
- COURSE.Course\_name
- GRADE\_REPORT.Section\_identifier

**2- State the meaningful primary key for each table.**

- PrimaryKey(STUDENT)=STUDENT.Student\_Number
- PrimaryKey(COURSE)=COURSE.Course\_number
- PrimaryKey(SECTION)=SECTION.Section\_identifier

**3- List foreign key(s) for each table.**

- SECTION.Course\_number
- GRADE\_REPORT.Student\_number
- GRADE\_REPORT.Section\_identifier
- PREREQUISITE.Course\_number

**4- List referential integrity rules for each relationship.**

- SECTION.Course\_number -> COURSE.Course\_number
- GRADE\_REPORT.Student\_number -> STUDENT.Student\_number
- GRADE\_REPORT.Section\_identifier -> SECTION.Section\_identifier
- PREREQUISITE.Course\_number -> COURSE.Course\_number
- PREREQUISITE.Prerequisite\_number -> COURSE.Course\_number

**5- Given the tables instead of Department (the last column of COURSE) and Instructor (the last column of SECTION) fields, namely DEPARTMENT and INSTRUCTOR, how can you restructure the tables COURSE and SECTION?**

DEPARTMENT(Department\_number, Department\_name, Chair)

INSTRUCTOR(Instructor\_name, Office\_number, E-mail)

**6- Populate (insert tuples(records)) the newly added tables with appropriate tuples.**

**COURSE**

Course_name	Course_number	Credit_hours	Department_number
Intro to Comp. Science	CS1310	4	01
Data Structures	CS3320	4	01
Disc. Maths	MATH2410	3	02
Database	CS3380	3	01

**SECTION**

Section_id	Course_number	Semester	Year	Instructor_email
85	MATH2410	Fall	07	king_a@ege.tr
92	CS1310	Fall	07	anderson_b@ege.tr
102	CS3320	Spring	08	knuth_c@ege.tr
112	MATH2410	Fall	08	chang_d@ege.tr
119	CS1310	Fall	08	anderson_b@ege.tr
135	CS3380	Fall	08	stone_f@ege.tr

**DEPARTMENT**

Department_number	Department_name	Chair
01	CS	Anderson
02	MATH	Chang

**INSTRUCTOR**

<b>Instructor_name</b>	<b>Office_number</b>	<b>Instructor_email</b>
King	02320000001	king_a@ege.tr
Anderson	02320000002	anderson_b@ege.tr
Knuth	02320000003	knuth_c@ege.tr
Chang	02320000004	chang_d@ege.tr
Stone	02320000005	anderson_e@ege.tr