

## Database exercises

1: The following three tables include data about employees and fine tickets.

### EMPLOYEE

Emp_ID	L_Name	F_Name	Phone_No	State_Lic	Lic_No
38249	Ali	Mohand	111-7804	New York	BRY 123
82453	Saed	Mazen	391-1689	New Mexico	TRE 141

### TICKET

Ticket#	Date	Code	Emp_ID
46383	10/17/08	2	38249
49696	11/13/08	1	38249
49585	10/05/08	3	82453
48575	11/18/08	1	82453
59686	12/13/08	2	82453

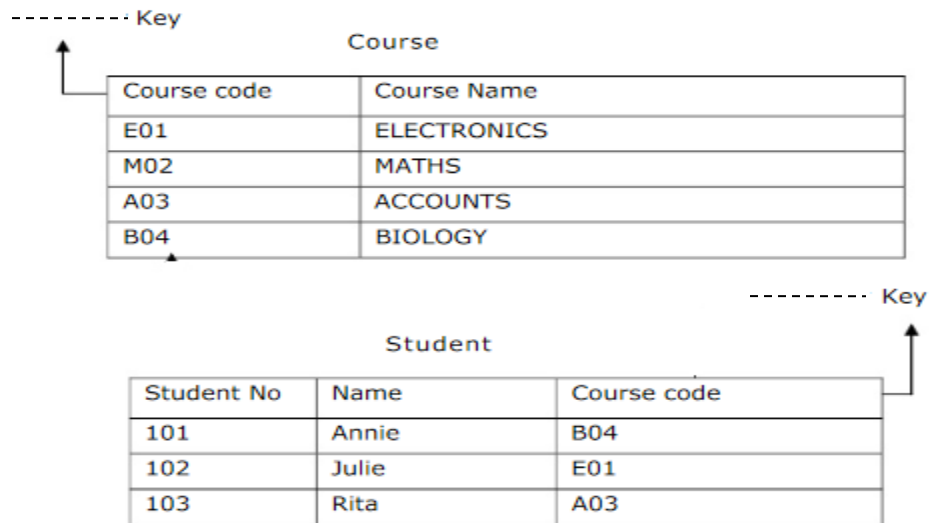
### TICKET\_CODE

Code	Fine	Violation
1	\$15	Longer than 3 hours
2	\$25	On pavement
3	\$100	Paralyze parking

Based on the given above tables answer the following questions:

1. The attributes of table TICKET is: <b>Ticket #,Date,Code,Emp_ID</b>
2. The primary key of TICKET_CODE table is: <b>Code</b>
3. What is the name of employee who had the ticket # "49696"? <b>Ali Mohand</b>
4. What is the total of fines payable by employee Ali Mohand? <b>\$40</b>
5. Which State does the employee Saed Mazen belong to? <b>New Mexico</b>
6. What is the ticket number of the parking violation that was committed on 10/05/08 and how much is it? <b>49585,\$100</b>

2: Complete the missing words below, then answer the questions.



1. The entities in the relations above are:-----**Course, Student**-----  
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2. Name the attributes of the Course table.-----**Course code, Course Name**-----  
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3. How many records in the Student table?**-----3-----**
4. Annie studies Biology course.(True, false) **True**

3: The following two tables include data about professors and courses.

**Courses**

Course_ID	Course_Name	Pro.ID
38	MIS 201	333
39	MIS 433	888
40	MIS 201	222
65	MIS 333	333
82	MIS 214	555

**Professors**

Pro.ID	Pro.Name	Salary	Hire date
333	Mazen Hani	20,000	22-10-2009
888	Fahad Saad	15,000	11-3-2012
222	Khaled Omar	18,000	4-3-2010
555	Ali Othman	13,000	13-4-2013

Based on the given above tables answer the following questions:

1. The attributes of table Professors are: <b>Pro.ID,Pro.Name,Salary,Hiredate</b>
2. The primary and foreign key of Course table are: Primary key..... <b>Course_ID</b> ..... Foreign key... <b>Pro.ID</b>
3. What <b>are</b> the name of professors who teach MIS 201? <b>Mazen Hani, Khaled Omar</b>
4. What are the name of the courses that Dr.Mazen Hani teaches? <b>MIS 201,MIS 333</b>
5. When Dr. Fahad was hired <b>and</b> how many courses does Dr. Fahad teach? <b>11-3-2012, 1</b>

**4.The following two tables include data about School and students .**

School Table

ID	Name	Total Cost for a year
S001	University of Technology	10,000
S002	University of Applied Science	20,000

Student Table

School ID	Student ID	Name	DOB	Semester
S001	UT-1000	Tommy	05/05/1995	1 <sup>st</sup> + 2 <sup>nd</sup>
S001	UT-1001	Better	14/04/1996	2 <sup>nd</sup>
S002	UAS-1000	Linda	02/09/1995	1 <sup>st</sup> + 2 <sup>nd</sup>
S002	UAS-1001	Jonathan	22/3/1995	1 <sup>st</sup> + 2 <sup>nd</sup>

- 1- What are the entities? **School Table,Student Table**
- 2- What are the primary and foreign key for Student table? **Student ID(Primary key ) – SchoolID (Foreign key)**
- 3- How many students studying at University of Applied Science? And how much their total cost? **Two Students, 40,000**
- 4- How much the total cost that Better has to pay? **5000**
- 5- How many record at Student table? **Four**