

Lab (4)

The database 'Employment' has the following relational model is:

- **Companies** (Number, Name, Address)
- **Candidates** (ID, LastName, Name, Email)
- **Offers** (Number, title, Keywords, company*)
- **Apply** (Candidate*, Offer*, DateApp)

Table	Primary key	Foreign key
Companies	Number	None
Candidates	ID	None
Offers	Number	Offers refers to the table Enterprises
Apply	Candidate , Offer	Apply table refers to the table Candidates and refers to the table Offers

Suppose we have the following information in the four tables:

Table Candidates			
<u>ID</u>	LastName	Name	Email
333	Bob	Jonson	bob@gmail.com
455	Jack	Brown	jack@gmail.com
656	Mary	Smith	mary@gmail.com
765	Kelly	Bay	kelly@gmail.com
234	Mike	Smith	mike@gmail.com

Table Companies		
<u>Number</u>	Name	Address
2	CEA	Paris
4	ALFA	Beirut
6	Touch	Beirut
8	Orange	Paris

Table Offres			
<u>Number</u>	Title	Keywords	Company
100	Programming	Java	2
101	Website	PHP	2
102	Website	ASP.NET	4
103	Client-server	Java	6

Table Apply		
<u>Candidate</u>	<u>Offer</u>	DateApp
333	100	12/2/2014
333	103	15/2/2014
656	100	15/2/2014
765	102	16/2/2014
234	101	17/2/2014
234	103	1/3/2014

Q1). Use SQL to create the two tables "Offers & Apply" in the database 'Employment'. Make sure to include the primary key, foreign key and null values. (3 pts)

Note: the following should be applied as a *check, default in the definition* of data:

- a. Set today's date as the **default** for the **DateApp** attribute in the table **apply**.
- b. The **Keywords** attribute of the table Offers can take as a value only: **Java, PHP, ASP.ENT, C#, VB.NET and C++**.

Q2). Write the SQL command to **add** the column **DOB** to table **Candidates**. (1 pt)

Q3). Write the SQL command to remove **Email** column from the table **Candidate**. (1 pt)

Q4). Write the SQL command to add a new **title** 'Website' with the **keyword** 'C#', for the company Orange. (1 pt)

Q5). Change the **address** of the company **ALFA** to **Saida**. (1.5 pt)

Q6). Remove all **Offers** from the company **ALFA**. (1.5 pt)

Q7). Give the details for the job offers with the term Java in its **keyword**. (1.5 pt)

Q8). Give **candidates** who applied to job offer number 10. (1.5 pt)

Q9). Give the job offers by the company called **Touch**. (2 pts)

Q10). Give all candidates applied to at least one job offer proposed by the company called **Touch**. (2pts)

Q11). Give the candidates who have applied to the same job which the candidate identified by ID 13 applied to. (2 pts)

Q12). For each offer, give the number of applied candidates. (2 pts)

Q13). Give candidates who have never applied for a job offer. (2 pts)

Q14). Give candidates who have applied to at least three job offers. (2 pts)