**Extra Exercises:**

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| 1. Find the **fname** of the employees who **directly supervised** with ‘**Kamel Mohamed’**. |
| SELECT e1.Fname  FROM Employee e1  INNER JOIN Employee e2  ON e1.Superssn = e2.SSN  WHERE e1.Superssn = 223344;   | **Query8** | | --- | | **Fname** | | Ahmed | | Hanaa | |
| 1. Retrieve a list of employees (**fname**) and the projects (**project name**) they are working on ordered by **department no, last name, first name**. |
| SELECT Fname,Pname  FROM Project p,Employee e,Works\_for w  WHERE p.Pnumber = w.Pno and w.ESSn = e.SSN  ORDER BY Fname,Dno,Lname;   | **Query9** | | | --- | --- | | **Fname** | **Pname** | | Ahmed | AL Solimaniah | | Edward | Al Rehab | | Edward | Pitcho american | | Kamel | AL Solimaniah | | Kamel | Al Rabwah | | Kamel | Al Rawdah | | Kamel | Al Rehab | | Maged | Al Rehab | | Maged | Al Rowad | | Maged | Pitcho american | | Maged | Al Rawdah | | Mariam | Al Rawdah | | Mariam | Al Rowad | | Mariam | Ebad El Rahman | | Noha | Ebad El Rahman | | Noha | Al Rawdah | | Noha | Al Rowad | |
| 1. Find the **project number**, the **controlling department name**, the **department manager last name**, address and **birthdate**. For each project located in ‘**Cairo’** City |
| SELECT DISTINCT Pnumber,e.Dno,Dname,e2.Fname,e2.Lname,e2.Address,e2.Bdate  FROM Project p,Departments d,Employee e,Employee e2  WHERE p.Dnum = d.Dnum and d.MGRSSN = e.Superssn and e.Superssn = e2.SSN and City = "Cairo";   | **Query10** | | | | | | | | --- | --- | --- | --- | --- | --- | --- | | **Pnumber** | **Dno** | **Dname** | **Fname** | **Lname** | **Address** | **Bdate** | | 500 | 20 | DP3 | Edward | Hanna | 18 Abaas El 3akaad St. Nasr City.Cairo | 8/19/1972 | | 600 | 20 | DP3 | Edward | Hanna | 18 Abaas El 3akaad St. Nasr City.Cairo | 8/19/1972 | | 700 | 30 | DP2 | Noha | Mohamed | 55 Orabi St. El Mohandiseen .Cairo | 1/2/1975 | |
| 1. For each department, retrieve the **department name** and the **maximum**, **minimum** and **average** **salary** of its employees. |
| SELECT Dname,COUNT(\*) as num\_employee,MIN(Salary) as min\_sal,MAX(Salary) as max\_sal,AVG(Salary) as avg\_sal  FROM Departments d,Employee e  WHERE d.Dnum = e.Dno  GROUP BY Dname,Dnum;   | **Query11** | | | | | | --- | --- | --- | --- | --- | | **Dname** | **num\_employee** | **min\_sal** | **max\_sal** | **avg\_sal** | | DP1 | 3 | 800 | 1800 | 1300 | | DP2 | 2 | 750 | 1600 | 1175 | | DP3 | 2 | 1000 | 1500 | 1250 | |