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| **Document Difficulty Level** | | | |
| **Beginner** | **Junior** | **Senior** | **Expert** |
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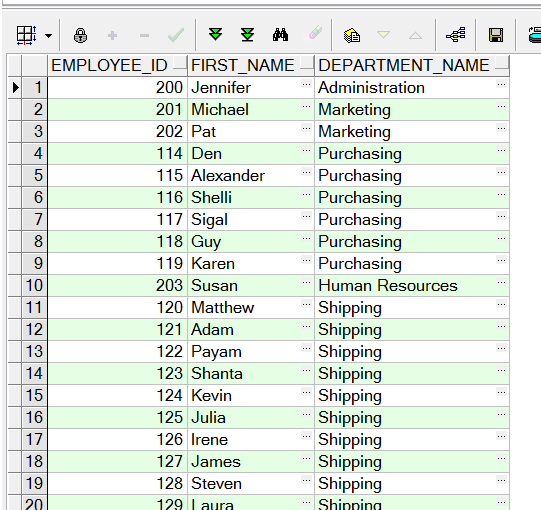
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| **Topic** | Oracle SQL Language Fundamentals I |
| **Document Name** | SQL01-EX-01-05 |
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# Oracle SQL Language Fundamentals I

## Exercise SQL01-EX-01:

**Definiton :** Write an SQL query that selects employee’s id, employee’s first name and employee’s department name for all employees. (Please use HR.EMPLOYEES and HR.DEPARTMENTS tables.)

**Sample Output :**

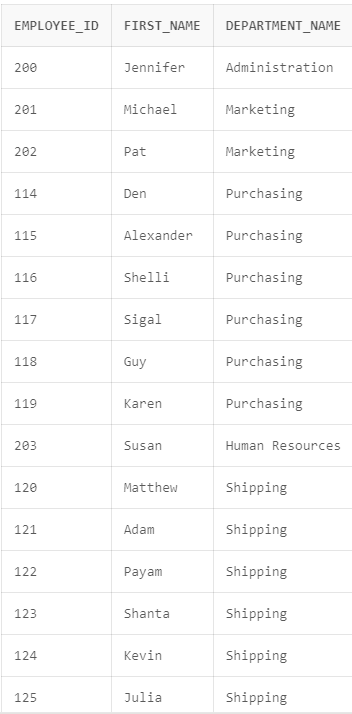
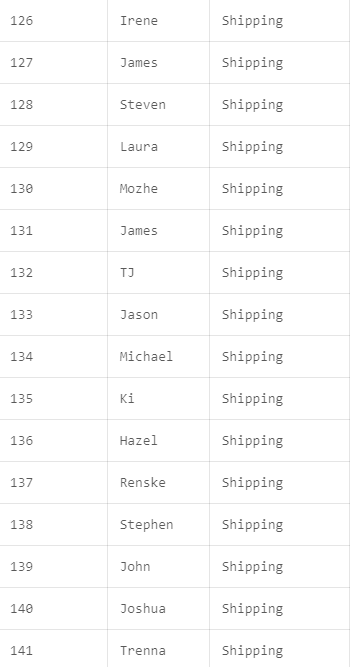


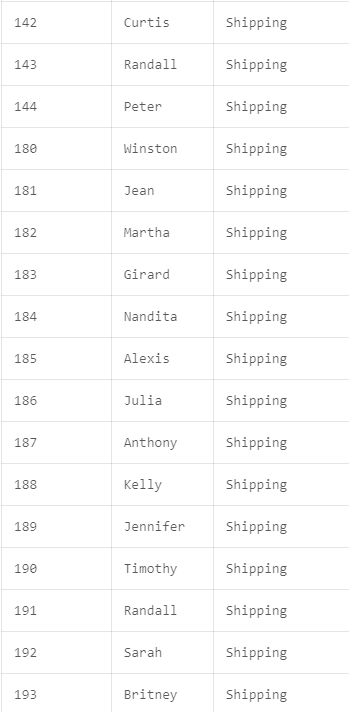
**Objectives** : To learn relations on tables and SQL language keyword JOIN.

**Exercise Keywords:** INNER JOIN, JOIN.

**Reply:**

select E.EMPLOYEE\_ID,E.FIRST\_NAME,D.DEPARTMENT\_NAME from HR.EMPLOYEES E inner join HR.DEPARTMENTS D on D.DEPARTMENT\_ID=E.DEPARTMENT\_ID

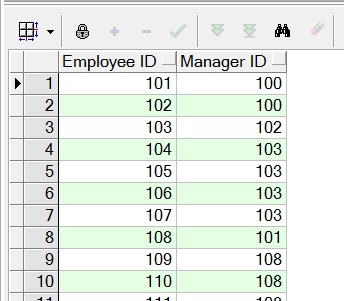


## Exercise SQL01-EX-02:

**Definiton :** Create a report that displays the employee’s id and their manager’s id. (Please use HR.EMPLOYEES table)

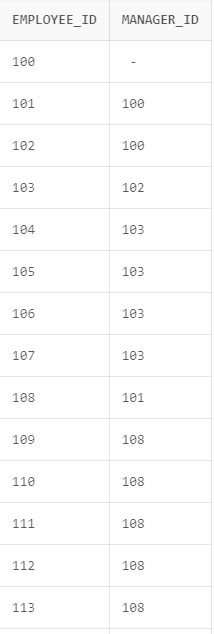
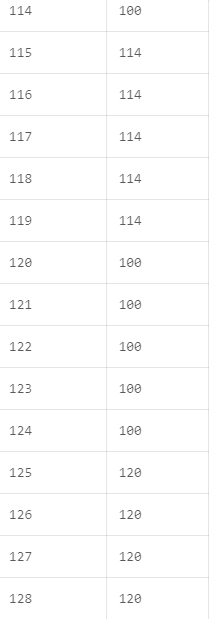
Tanım: Çalışanın kimliğini ve yöneticisinin kimliğini gösteren bir rapor oluşturun. (Lütfen HR.EMPLOYEES tablosunu kullanın)

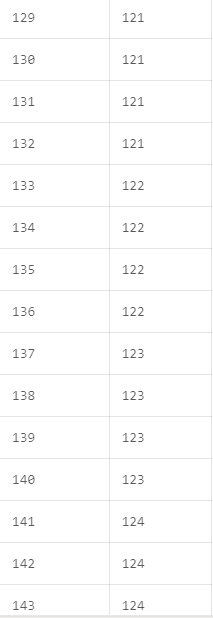
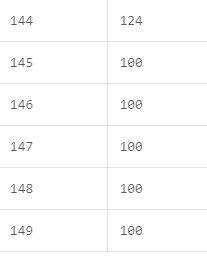
**Sample Output :**



**Objectives** : To learn SQL join logic like SELF JOIN.

**Reply:** SELECT E1.EMPLOYEE\_ID, E2.EMPLOYEE\_ID AS MANAGER\_ID FROM HR.EMPLOYEES E1 LEFT JOIN HR.EMPLOYEES E2 ON E1.MANAGER\_ID = E2.EMPLOYEE\_ID;

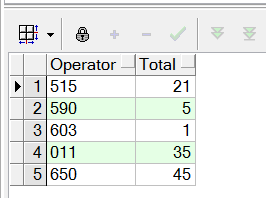
 

Exercise SQL01-EX-03:

**Definiton :** For example; first three character of PHONE\_NUMBER column gives us a operator of employee. Create a report that displays the operators and their total subscriber. (Please use HR.EMPLOYEES table)

Tanımı : Örneğin; PHONE\_NUMBER sütununun ilk üç karakteri bize çalışanın operatörünü verir. Operatörleri ve toplam abone sayısını gösteren bir rapor oluşturun. (Lütfen HR.EMPLOYEES tablosunu kullanın)

**Sample Output :**

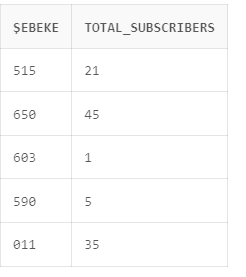


**Objectives** : To learn basic SQL keywords like COUNT, SUM, CASE.

**Reply: SELECT SUBSTR(E.PHONE\_NUMBER, 1, 3) AS OPERATOR, COUNT(\*) AS TOTAL\_SUBSCRIBERS**

**FROM HR.EMPLOYEES E**

**GROUP BY SUBSTR(E.PHONE\_NUMBER, 1, 3);**

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## Exercise SQL01-EX-04:

**Definiton :** Write a query that displays the grade of all employees based on the value of the column JOB\_ID, using the following data: (Write two version with CASE WHEN and DECODE)

Tanım: Aşağıdaki verileri kullanarak JOB\_ID sütununun değerine göre tüm çalışanların notunu görüntüleyen bir sorgu yazın: (CASE WHEN ve DECODE ile iki versiyon yazın)

|  |  |
| --- | --- |
| **Job** | **Grade** |
| AD\_PRES | A |
| ST\_MAN | B |
| IT\_PROG | C |
| SA\_REP | D |
| ST\_CLERK | E |
| None of the above | 0 |

**Reply:**

SELECT E.EMPLOYEE\_ID, E.JOB\_ID,

CASE

WHEN E.JOB\_ID = 'JOB\_1' THEN 'Grade A'

WHEN E.JOB\_ID = 'JOB\_2' THEN 'Grade B'

WHEN E.JOB\_ID = 'JOB\_3' THEN 'Grade C'

ELSE 'Grade D'

END AS GRADE

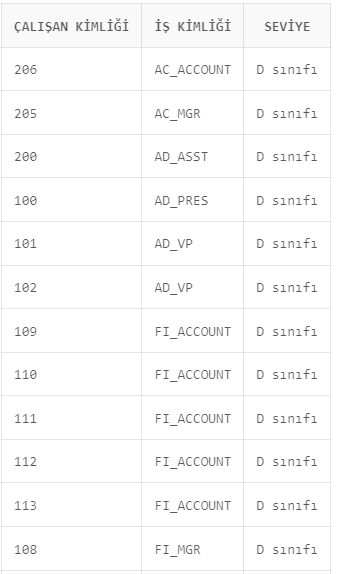
FROM HR.EMPLOYEES E;

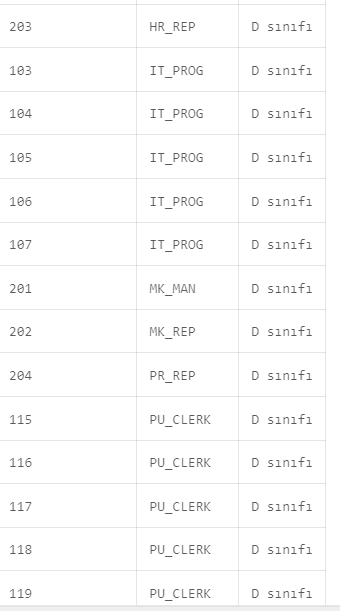
SELECT E.EMPLOYEE\_ID, E.JOB\_ID,

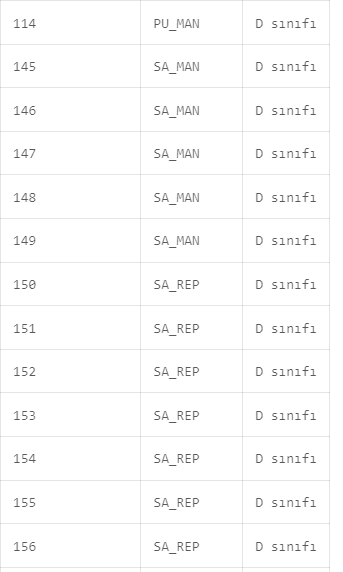
DECODE(E.JOB\_ID, 'JOB\_1', 'Grade A', 'JOB\_2', 'Grade B', 'JOB\_3', 'Grade C', 'Grade D') AS GRADE

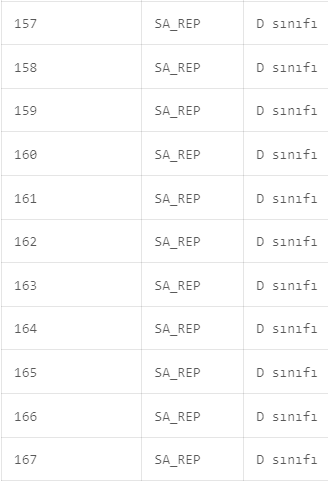
FROM HR.EMPLOYEES E;

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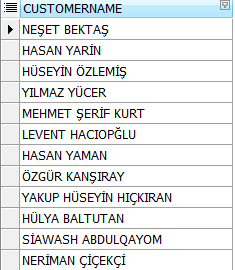


## Exercise SQL01-EX-05:

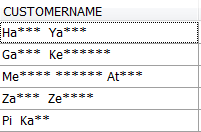
**Definiton :**

Select employees’ first name and last name as masked with “\*” character as shown in sample output below.

Aşağıdaki örnek çıktıda gösterildiği gibi çalışanların adını ve soyadını “\*” karakteriyle maskelenmiş olarak seçin.



**Sample Output :**



**Objectives** : To learn basic SQL functions like length, substr, instr, trim, initcap, rpad, lpad, regexp\_replace, regexp\_substr

**Reply: SELECT**

**RPAD(SUBSTR(E.FIRST\_NAME, 1, 1), LENGTH(E.FIRST\_NAME), '\*') AS MASKED\_FIRST\_NAME,**

**RPAD(SUBSTR(E.LAST\_NAME, 1, 1), LENGTH(E.LAST\_NAME), '\*') AS MASKED\_LAST\_NAME**

**FROM HR.EMPLOYEES E;**

