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

// Answer 1

**SELECT**

**e.employee\_id,**

**e.first\_name,**

**d.department\_name**

**FROM**

**HR.EMPLOYEES e**

**INNER JOIN**

**HR.DEPARTMENTS d**

**ON**

**e.department\_id = d.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)

**Sample Output :**



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

**SELECT**

**EMP.employee\_id,**

**MAN.employee\_id AS manager\_id**

**FROM**

**HR.EMPLOYEES EMP**

**JOIN**

**HR.EMPLOYEES MAN**

**ON**

**EMP.manager\_id = MAN.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. But we want two different displays with diffrent queries. (Please use HR.EMPLOYEES table)

**Sample Output :**





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

**SELECT**

**SUBSTR(phone\_number, 1, 3) AS Operator,**

**COUNT(\*) AS Total**

**FROM**

**HR.EMPLOYEES**

**GROUP BY**

**SUBSTR(phone\_number, 1, 3);**

**Exercise SQL01-EX-04:**

**Definiton :** Create a table (table name like HR.EMP) from HR.EMPLOYEES table. Insert a new row to HR.EMP table and update this employee’s phone number and salary. Delete your new row and display the HR.EMP table. Finally drop your table HR.EMP.

**Sample Output :**





**Objectives** : To learn basic SQL keywords like INSERT, UPDATE, DELETE, DROP and CREATE TABLE from table.

**CREATE TABLE HR.emp (**

**employee\_id NUMBER(10),**

**first\_name VARCHAR2(25),**

**last\_name VARCHAR2(25),**

**email VARCHAR2(25),**

**phone\_number VARCHAR2(25),**

**hire\_date DATE,**

**job\_id VARCHAR2(10),**

**salary NUMBER(10,2),**

**commision\_pct NUMBER(3,2),**

**manager\_id NUMBER(10),**

**department\_id NUMBER(10)**

**);**

**INSERT INTO HR.emp (**

**employee\_id,**

**first\_name,**

**last\_name,**

**email,**

**phone\_number,**

**hire\_date,**

**job\_id,**

**salary,**

**commision\_pct,**

**manager\_id,**

**department\_id**

**) VALUES (**

**9999,**

**'John',**

**'Doe',**

**'john.doe@example.com',**

**'123-456-7890',**

**SYSDATE,**

**'IT\_PROG',**

**5000,**

**0.10,**

**101,**

**20**

**);**

**UPDATE HR.emp**

**SET**

**phone\_number = '987-654-3210',**

**salary = 5500**

**WHERE**

**employee\_id = 9999;**

**DELETE FROM HR.emp**

**WHERE employee\_id = 9999;**

**Exercise SQL01-EX-05:**

**Definiton :**

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



**Sample Output :**



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

**SELECT**

**INITCAP(SUBSTR(first\_name, 1, 1) || RPAD('\*', LENGTH(first\_name) - 1, '\*')),**

**INITCAP(SUBSTR(last\_name, 1, 1) || RPAD('\*', LENGTH(last\_name) - 1, '\*'))**

**FROM**

**HR.EMPLOYEES;**