

ASSIGNMENT 2

TABLE CREATION IN DEMO_DATABASE

Table Name - EMPLOYEES

USE DEMO_DATABASE;

CREATE OR REPLACE TABLE employees (

employee_id INT PRIMARY KEY,

first_name VARCHAR(50),

last_name VARCHAR(50),

department VARCHAR(50),

hire_date DATE,

salary INT);

The screenshot displays the SQL Developer interface. On the left, the 'EMPLOYEES' table is listed under 'No pinned objects'. The table structure shows columns: EMPLOYEE_ID (NUMBER(38,0)), FIRST_NAME (VARCHAR(50)), LAST_NAME (VARCHAR(50)), DEPARTMENT (VARCHAR(50)), HIRE_DATE (DATE), and SALARY (NUMBER(38,0)). The main pane shows the SQL script for creating the table, with the 'Results' tab active. The results table shows a single row with the status 'Table EMPLOYEES successfully created.'

```
1  USE DEMO_DATABASE;
2
3  ----TABLE CREATION----
4
5  CREATE OR REPLACE TABLE employees (
6      employee_id INT PRIMARY KEY,
7      first_name VARCHAR(50),
8      last_name VARCHAR(50),
9      department VARCHAR(50),
10     hire_date DATE,
11     salary INT
12 );
```

status	
1	Table EMPLOYEES successfully created.

DATA INSERTION

INSERT INTO employees (employee_id, first_name, last_name, department, hire_date, salary)

VALUES

(1, 'John', 'Doe', 'HR', '2020-01-15', 50000),

(2, 'Jane', 'Smith', 'IT', '2019-04-20', 60000),

(3, 'Michael', 'Johnson', 'Finance', '2021-08-10', 55000),

(4, 'Emily', 'Davis', 'Marketing', '2018-02-05', 52000),

(5, 'David', 'Wilson', 'IT', '2022-03-30', 62000);

The screenshot displays the SQL Developer interface with the SQL script for inserting data into the EMPLOYEES table. The 'Results' tab is active, showing a table with the header 'number of rows inserted' and a single row with the value 5.

```
13  ----DATA INSERTION----
14  INSERT INTO employees (employee_id, first_name, last_name, department, hire_date, salary)
15  VALUES
16      (1, 'John', 'Doe', 'HR', '2020-01-15', 50000),
17      (2, 'Jane', 'Smith', 'IT', '2019-04-20', 60000),
18      (3, 'Michael', 'Johnson', 'Finance', '2021-08-10', 55000),
19      (4, 'Emily', 'Davis', 'Marketing', '2018-02-05', 52000),
20      (5, 'David', 'Wilson', 'IT', '2022-03-30', 62000);
21
```

number of rows inserted	
1	5

SELECT * FROM DEMO_DATABASE.PUBLIC.EMPLOYEES;

--
27 | SELECT * FROM DEMO_DATABASE.PUBLIC.EMPLOYEES;

Results Chart

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	DEPARTMENT	HIRE_DATE	SALARY
1	1	John	Doe	HR	2020-01-15	50,000
2	2	Jane	Smith	IT	2019-04-20	60,000
3	3	Michael	Johnson	Finance	2021-08-10	55,000
4	4	Emily	Davis	Marketing	2018-02-05	52,000
5	5	David	Wilson	IT	2022-03-30	62,000

1. Retrieve the first and last names of all employees.

SELECT FIRST_NAME, LAST_NAME FROM EMPLOYEES;

ACCOUNTADMIN

DEMO_DATABASE.PUBLIC Settings

--1. Retrieve the first and last names of all employees.--
26 |
27 | SELECT FIRST_NAME, LAST_NAME FROM EMPLOYEES;
28 |
29 |
30 |

Results Chart

	FIRST_NAME	LAST_NAME
1	John	Doe
2	Jane	Smith
3	Michael	Johnson
4	Emily	Davis
5	David	Wilson

2. Find the total number of employees in the company.

SELECT COUNT(EMPLOYEE_ID) FROM EMPLOYEES;

--There are total 5 employees in company --

27 |
28 | --2. Find the total number of employees in the company.--
29 | SELECT COUNT(EMPLOYEE_ID) FROM EMPLOYEES;
30 |

Results Chart

	COUNT(EMPLOYEE_ID)
1	5

3. Get the names of employees who work in the IT department.--

**SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS EMPLOYEE_NAME, DEPARTMENT
FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
WHERE DEPARTMENT= 'IT';**

```

52
53 --3. Get the names of employees who work in the IT department.--
54 SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS EMPLOYEE_NAME, DEPARTMENT FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
55 WHERE DEPARTMENT= 'IT'
56 ;
57

```

Results			Chart
	EMPLOYEE_NAME	DEPARTMENT	...
1	Jane Smith	IT	
2	David Wilson	IT	

4. Calculate the average salary of all employees.

SELECT ROUND(AVG(SALARY),1) AS AVG_SALARY FROM EMPLOYEES;

the average salary of all employees is **55800**

```
36  |
37
38  --4. Calculate the average salary of all employees.--
39  | SELECT ROUND(AVG(SALARY),1) AS AVG_SALARY FROM EMPLOYEES;
40
41
42
43
```

Results

Chart

	AVG_SALARY	Qu
1	55800.0	Qu

5. Find the employee with the highest salary

We can find in 2 ways:

1 method:

```

SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS NAME, MAX(SALARY) AS HIGHEST_SALARY
FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
GROUP BY 1
ORDER BY 2 DESC          --(here 'GROUP BY' is optional)--
LIMIT 1;

```

2 method:

```

SELECT EMPLOYEE_ID, CONCAT(FIRST_NAME, ' ', LAST_NAME) AS EMPLOYEE_NAME, SALARY
FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
ORDER BY 3 DESC
LIMIT 1;

```

David Wilson has the highest salary- **62,000**

```
43
44 --5. Find the employee with the highest salary--
45 --method 1--
46 SELECT EMPLOYEE_ID, CONCAT(FIRST_NAME, ' ', LAST_NAME) AS EMPLOYEE_NAME, SALARY
47 FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
48 ORDER BY 3 DESC
49 LIMIT 1;
50
51 --method2--
52
53 SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS NAME, MAX(SALARY) AS HIGHEST_SALARY
54 FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
55 GROUP BY 1
56 ORDER BY 2 DESC --(here GROUP BY is optional)--
57 LIMIT 1;
58
```

Results Chart

	EMPLOYEE_ID	EMPLOYEE_NAME	SALARY
1	5	David Wilson	62,000

6. List the employees hired before January 1, 2021, along with their hire dates.--

```
SELECT EMPLOYEE_ID, CONCAT(FIRST_NAME, ' ', LAST_NAME) AS EMPLOYEE_NAME, HIRE_DATE
FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
WHERE HIRE_DATE < '2020-01-01';
```

```
55
56
57 --6. List the employees hired before January 1, 2021, along with their hire dates.--
58 SELECT EMPLOYEE_ID, CONCAT(FIRST_NAME, ' ', LAST_NAME) AS EMPLOYEE_NAME, HIRE_DATE
59 FROM DEMO_DATABASE.PUBLIC.EMPLOYEES
60 WHERE HIRE_DATE < '2020-01-01';
61
62
```

Results Chart

	EMPLOYEE_ID	EMPLOYEE_NAME	HIRE_DATE
1	2	Jane Smith	2019-04-20
2	4	Emily Davis	2018-02-05