

--CREATING A DATABASE

CREATE OR REPLACE DATABASE AD_ASSIGNMENT;

-- ACTIVATING THE DATABASE

USE AD_ASSIGNMENT;

-- CREATING A TABLE

CREATE OR REPLACE TABLE AD_employees

(
 employee_id INT PRIMARY KEY,
 first_name VARCHAR(50),
 last_name VARCHAR(50),
 department VARCHAR(50),
 hire_date DATE,
 salary INT
);

-- INSERING VALUE INTO ALREADY CREATED TABLE

INSERT INTO AD_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);

-- CHECKING THE VALUES OF TABLE

SELECT * FROM AD_EMPLOYEES;

```
27 -- CHECKING THE VALUES OF TABLE
28 | SELECT * FROM AD_EMPLOYEES;
29
30 -- COUNTING NO OF ROWS.
```

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	

Query Details

...

Query duration

50ms

Rows

5

Query ID

01af3f6e-3200-e740-0...

EMPLOYEE_ID

#

-- COUNTING NO OF ROWS.

SELECT COUNT(*) FROM AD_EMPLOYEES; -- 5 ROWS

```
30 -- COUNTING NO OF ROWS.
31 | SELECT COUNT(*) FROM AD_EMPLOYEES; -- 5 ROWS
32
33
```

Results		Chart						
							COUNT(*)	
1							5	

-- QUESTION ANSWERS

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

SELECT EMPLOYEE_ID,FIRST_NAME,LAST_NAME

FROM AD_EMPLOYEES;

```
34 -- QUESTION ANSWERS
35 -- 1. Retrieve the first and last names of all employees.
36
37 | SELECT EMPLOYEE_ID,FIRST_NAME,LAST_NAME
38 | FROM AD_EMPLOYEES;
39
```

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

Query Details

...

Query duration

113ms

Rows

5

Query ID

01af3f71-3200-e6dd-0...

EMPLOYEE_ID

#

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

```
SELECT COUNT(DISTINCT EMPLOYEE_ID) AS NUMBER_OF_EMPLOYEES  
FROM AD_EMPLOYEES; -- GIVES 5 EMPLOYEES
```

42 SELECT COUNT(DISTINCT EMPLOYEE_ID) AS NUMBER_OF_EMPLOYEES
43 FROM AD_EMPLOYEES; -- GIVES 5 EMPLOYEES
44

Results

Chart

	NUMBER_OF_EMPLOYEES
1	5

Query Details

Query duration 72ms

Rows 1

Query ID 01af3f72-3200-e707-0...

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

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS NAME_OF_EMPLOYEES_IN_IT_DEPT  
FROM AD_EMPLOYEES  
WHERE DEPARTMENT = 'IT';
```

45-- 3. Get the names of employees who work in the IT department.
46
47SELECT FIRST_NAME||' '||LAST_NAME AS NAME_OF_EMPLOYEES_IN_IT_DEPT
48FROM AD_EMPLOYEES
49WHERE DEPARTMENT = 'IT';
50

ResultsChart

	NAME_OF_EMPLOYEES_IN_IT_DEPT
1	Jane Smith
2	David Wilson

Query Details

...

Query duration52ms

Rows2

Query ID01af3f73-3200-e707-0...

NAME_OF_EMPLOYEES_IN_IT_DEPT

100% filled

-- 4. Calculate the average salary of all employees.

```
SELECT COUNT(EMPLOYEE_ID) AS NO_OF_EMPLOYEES, SUM(SALARY) AS  
TOT_SALARY_OF_EMPLOYEES,  
ROUND(TOT_SALARY_OF_EMPLOYEES/NO_OF_EMPLOYEES,0) AS AVG_SALARY_OF_EMPLOYEES  
FROM AD_EMPLOYEES; -- AVG SALARY OF EMPLOYEES IS 55800.
```

Results		Chart	🔍 🗑️ ⬇️ 📄
NAME_OF_EMPLOYEES_IN_IT_DEPT			Query Details ⋮ Query duration 52ms Rows 2 Query ID 01af3f73-3200-e707-0... NAME_OF_EMPLOYEES_IN_IT_DEPT ⬆️ 100% filled
1	Jane Smith		
2	David Wilson		

```
-- METHOD-1
```

LIMIT 1; -- DAVID WILSON HAS HIGHEST SALARY WITH 62000.

Results

Chart

	EMPLOYEE_ID	EMPLOYEE_WITH_HIGHEST_SALARY	SALARY
1	5	David Wilson	62,000

Query Details

Query duration

68ms

Rows

1

Query ID

01af3f77-3200-e6dd-0...

EMPLOYEE_ID

#

100% filled

WHERE SALARY = (SELECT MAX(SALARY) FROM AD_EMPLOYEES);

```
65 -- METHOD -2
66 SELECT EMPLOYEE_ID,FIRST_NAME||' '||LAST_NAME AS EMPLOYEE_WITH_HIGHEST_SALARY,SALARY
67 FROM AD_EMPLOYEES
68 WHERE SALARY = (SELECT MAX(SALARY) FROM AD_EMPLOYEES);
69
```

Results Chart

	EMPLOYEE_ID	EMPLOYEE_WITH_HIGHEST_SALARY	SALARY
1	5	David Wilson	62,000

Query Details

Query duration 549ms

Rows 1

Query ID 01af3f78-3200-e707-0...

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

```
SELECT EMPLOYEE_ID,FIRST_NAME||' '||LAST_NAME AS EMPLOYEES_HIRED_BEFORE_2021_01_01
FROM AD_EMPLOYEES
WHERE HIRE_DATE < '2021-01-01';
```

```
71 -- 6. List the employees hired before January 1, 2021, along with their hire dates.
72
73 SELECT EMPLOYEE_ID,FIRST_NAME||' '||LAST_NAME AS EMPLOYEES_HIRED_BEFORE_2021_01_01
74 FROM AD_EMPLOYEES
75 WHERE HIRE_DATE < '2021-01-01';
```

Results Chart

...	EMPLOYEE_ID	EMPLOYEES_HIRED_BEFORE_2021_01_01
	1	John Doe
?	2	Jane Smith
}	4	Emily Davis

Query Details

Query duration 59ms

Rows 3

Query ID 01af3f79-3200-e707-0...

EMPLOYEE_ID #