

## EXERCISE-4

### Writing Basic SQL SELECT Statements

NAME	PRATHESHA J
ROLL NO	241001172
DEPARTMENT	IT

## 1. Identify the Errors

```
SELECT employee_id, last_name  
      sal*12 ANNUAL SALARY  
   FROM employees;
```

The screenshot shows a SQL command window with the following details:

- SQL Commands** tab is selected.
- Language: SQL
- Rows: 10
- Clear Command, Find Tables buttons are present.
- Run button is green.
- Schema: WKSP\_RENAT7
- Query entered:

```
1 SELECT employee_id, last_name, salary * 12 AS "ANNUAL SALARY"  
2 FROM employees;  
3  
4
```
- Results tab is selected.
- Table output:

EMPLOYEE_ID	LAST_NAME	ANNUAL SALARY
101	Sharma	720000
102	Kumar	540000
103	Rao	600000
104	Verma	840000
- Message at the bottom: "4 rows returned in 0.01 seconds" and a "Download" link.

## 2. Show the structure of departments of the table. Select all the data from it.

The screenshot shows a SQL command window with the following details:

- SQL Commands** tab is selected.
- Language: SQL
- Rows: 10
- Clear Command, Find Tables buttons are present.
- Run button is green.
- Schema: WKSP\_RENAT7
- Query entered:

```
1 DESC DEPARTMENT_TABLE;
```
- Results tab is selected.
- Object Type: TABLE
- Object: DEPARTMENT\_TABLE
- Table structure output:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPARTMENT_TABLE	DEPT_ID	NUMBER	-	6	0	1	-	-	-
	DEPT_NAME	VARCHAR2	20	-	-	-	-	-	-
	MANAGER_ID	NUMBER	-	6	0	-	✓	-	-
	LOCATION_ID	NUMBER	-	4	0	-	✓	-	-

↑ SQL Commands Schema WKSP\_RENA73

Language SQL Rows 10 Clear Command Find Tables Save Run

```
1 SELECT * FROM DEPARTMENT_TABLE;
2
```

Results Explain Describe Saved SQL History

DEPT_ID	DEPT_NAME	MANAGER_ID	LOCATION_ID
10	Administration	200	1700
20	Marketing	201	1800
30	Purchasing	114	1700
40	IT	103	1400

4 rows returned in 0.01 seconds Download

3. Create a query to display the last name, job code, hire date, and employee number for each employee, with employee number appearing first.

↑ SQL Commands Schema WKSP\_RENA73

Language SQL Rows 10 Clear Command Find Tables Save Run

```
1 SELECT employee_id, last_name, job_id, hire_date
2 FROM employees;
```

Results Explain Describe Saved SQL History

EMPLOYEE_ID	LAST_NAME	JOB_ID	HIRE_DATE
101	Sharma	IT_PROG	1/15/2020
102	Kumar	MK_REP	3/10/2019
103	Rao	HR_REP	7/5/2021
104	Verma	PU_MAN	11/20/2022

4 rows returned in 0.03 seconds Download

4. Provide an alias STARTDATE for the hire date.

↑ SQL Commands Schema WKSP\_RENA73

Language SQL Rows 10 Clear Command Find Tables Save Run

```
1 SELECT employee_id, last_name, job_id, hire_date AS STARTDATE
2 FROM employees;
```

Results Explain Describe Saved SQL History

EMPLOYEE_ID	LAST_NAME	JOB_ID	STARTDATE
101	Sharma	IT_PROG	1/15/2020
102	Kumar	MK_REP	3/10/2019
103	Rao	HR_REP	7/5/2021
104	Verma	PU_MAN	11/20/2022

4 rows returned in 0.01 seconds Download

5. Create a query to display unique job codes from the employee table.

The screenshot shows a SQL command window with the following details:

- Language: SQL
- Rows: 10
- Schema: WKSP\_RENAT5
- SQL Command:

```
1 SELECT DISTINCT job_id
2 FROM employees;
```
- Results tab selected.
- Output table header: JOB\_ID
- Data rows: HR REP, PU MAN, IT PROG, MK REP
- Message: 4 rows returned in 0.01 seconds

6. Display the last name concatenated with the job ID , separated by a comma and space, and name the column EMPLOYEE and TITLE.

The screenshot shows a SQL command window with the following details:

- Language: SQL
- Rows: 10
- Schema: WKSP\_RENAT5
- SQL Command:

```
1 SELECT last_name || ', ' || job_id AS "EMPLOYEE and TITLE"
2 FROM employees;
```
- Results tab selected.
- Output table header: EMPLOYEE and TITLE
- Data rows: Sharma, IT PROG, Kumar, MK REP, Rao, HR REP, Verma, PU MAN
- Message: 4 rows returned in 0.01 seconds

7. Create a query to display all the data from the employees table. Separate each column by a comma. Name the column THE\_OUTPUT.

The screenshot shows a SQL command window with the following details:

- Language: SQL
- Rows: 10
- Schema: WKSP\_RENAT5
- SQL Command:

```
1 SELECT employee_id || ',' ||
2 first_name || ',' ||
3 last_name || ',' ||
4 email || ',' ||
5 phone_number || ',' ||
6 hire_date || ',' ||
7 job_id || ',' ||
8 salary || ',' ||
9 commission_pct || ',' ||
10 manager_id || ',' ||
11 department_id AS THE_OUTPUT
12 FROM employees;
13
```
- Results tab selected.
- Output table header: THE\_OUTPUT
- Data rows: 101, Neha, Sharma, NSHARMA, 9876543210, 1/15/2020, IT\_PROG, 60000,, 40  
102, Amit, Kumar, AKUMAR, 9123456780, 3/10/2019, MK\_REP, 45000,, 20  
103, Priya, Rao, PRAD, 9988776555, 7/5/2021, HR\_REP, 50000,, 10  
104, Rahul, Verma, RVERMA, 9090909090, 11/20/2022, PU\_MAN, 70000,, 30
- Message: 4 rows returned in 0.01 seconds