

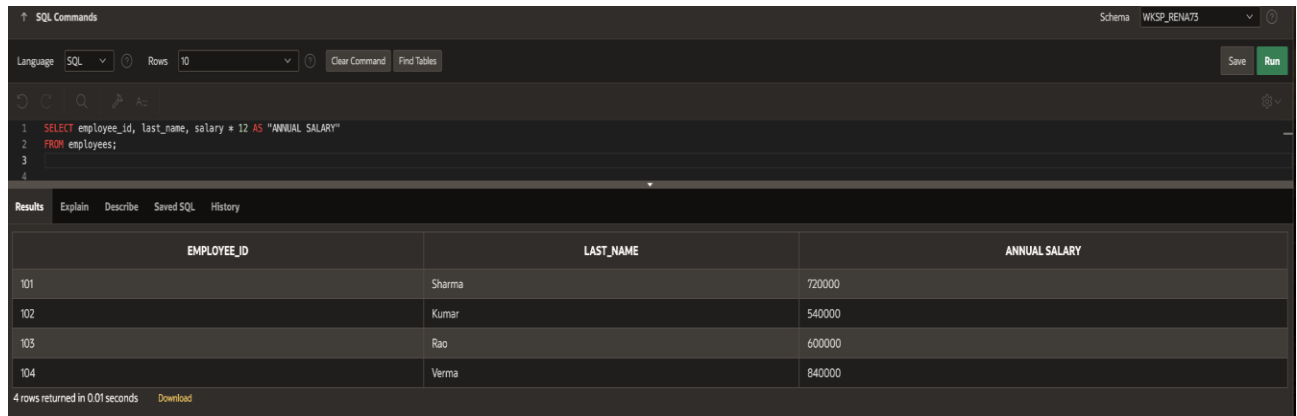
## EXERCISE-4

### 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;
```



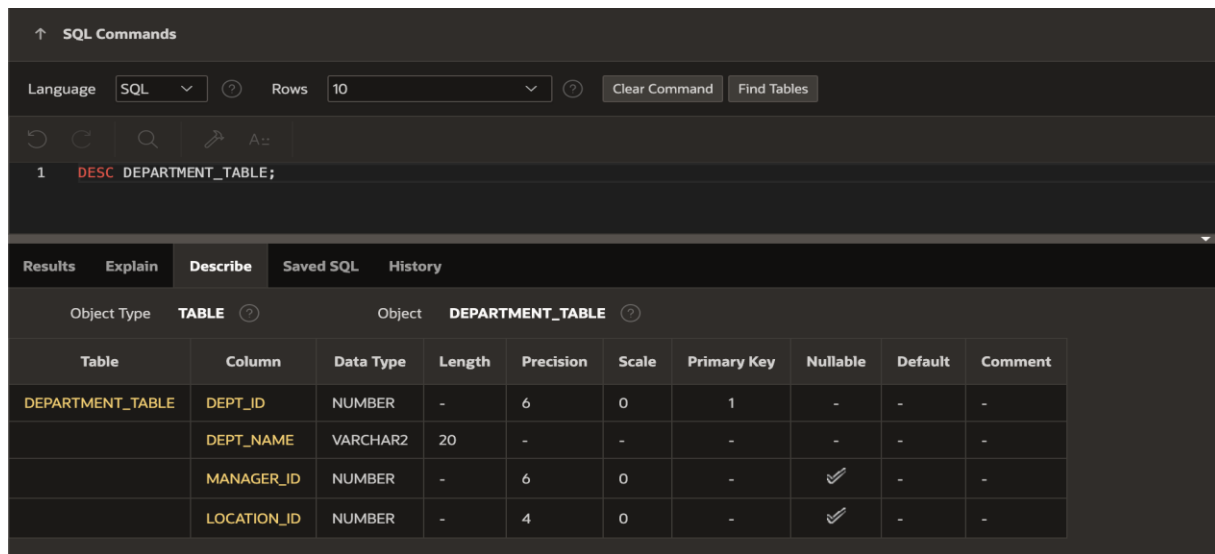
The screenshot shows the SQL Developer interface with the following components:

- SQL Commands Panel:** Contains the query: `SELECT employee_id, last_name, salary * 12 AS "ANNUAL SALARY" FROM employees;`
- Results Panel:** Displays the query results in a table with 4 rows.

EMPLOYEE_ID	LAST_NAME	ANNUAL SALARY
101	Sharma	720000
102	Kumar	540000
103	Rao	600000
104	Verma	840000

4 rows returned in 0.01 seconds

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



The screenshot shows the SQL Developer interface with the following components:

- SQL Commands Panel:** Contains the command: `DESC DEPARTMENT_TABLE;`
- Describe Panel:** Displays the table structure for DEPARTMENT\_TABLE.

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 0.05 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 the SQL Developer interface with the following SQL query entered in the command window:

```
1 SELECT DISTINCT job_id
2 FROM employees;
```

The results pane displays the following data:

JOB_ID
HR_REP
PJ_MAN
IT_PROG
MK_REP

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 the SQL Developer interface with the following SQL query entered in the command window:

```
1 SELECT last_name || ', ' || job_id AS "EMPLOYEE and TITLE"
2 FROM employees;
```

The results pane displays the following data:

EMPLOYEE and TITLE
Sharma, IT_PROG
Kumar, MK_REP
Rao, HR_REP
Verma, PJ_MAN

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 the SQL Developer interface with the following SQL query entered in the command window:

```
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;
```

The results pane displays the following data:

THE_OUTPUT
101, Noha, 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, PRIAD, 9988776655, 7/5/2021, HR_REP, 50000, ..., 10
104, Rahul, Verma, RVERMA, 9090909090, 11/20/2022, PJ_MAN, 70000, ..., 30

4 rows returned in 0.01 seconds