

DATABASE MANAGEMENT SYSTEM

CS23332

EXERCISE 4
WRITING BASIC SQL SELECT STATEMENTS

ISHWARIYA R
241801097

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

Language SQL Rows 10 Clear Command Find Tables

1 DESC DEPARTMENT;

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

1 DESC DEPARTMENT;
2 SELECT * FROM DEPARTMENT;

Results	Explain	Describe	Saved SQL	History
DEPT_ID	DEPT_NAME	MANAGER_ID	LOCATION_ID	
10	Development	1001	101	
20	Human Resources	1003	102	
30	Sales	1004	103	
40	Finance	-	104	

4 rows returned in 0.03 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.

The screenshot shows a SQL query being run in a database client. The query is:

```
1 SELECT Employee_id,Last_name,Job_id,Hire_date from EMPLOYEES;
```

The results are displayed in a table with four columns: EMPLOYEE_ID, LAST_NAME, JOB_ID, and HIRE_DATE. The data is as follows:

EMPLOYEE_ID	LAST_NAME	JOB_ID	HIRE_DATE
1003	Johnson	HR01	7/1/2021
1004	Williams	SALES1	11/30/2018
1002	Smith	DEV02	3/22/2019
1001	Doe	DEV01	1/15/2020

4. Provide an alias STARTDATE for the hire date.

Language SQL Rows 10 Clear Command Find Tables Save Run

1 SELECT Employee_id,Last_name,Job_id,Hire_date AS STARTDATE from EMPLOYEES;

Results Explain Describe Saved SQL History

EMPLOYEE_ID	LAST_NAME	JOB_ID	STARTDATE
1003	Johnson	HR01	7/1/2021
1004	Williams	SALES1	11/30/2018
1002	Smith	DEV02	3/22/2019
1001	Doe	DEV01	1/15/2020

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 query interface with the following details:

- Toolbar:** Includes icons for back, forward, search, and edit.
- Query Editor:** Shows the SQL command: `1 SELECT DISTINCT JOB_ID from EMPLOYEES;`
- Results Tab:** Active tab, showing the output of the query.
- Output:** A table with one column labeled `JOB_ID`, containing four distinct values: `DEV02`, `HR01`, `SALES1`, and `DEV01`.
- Statistics:** At the bottom left, it says `4 rows returned in 0.00 seconds`. At the bottom right, there is a `Download` link.

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 database query results page from Oracle APEX. At the top, there is a SQL editor with the following query:

```
1 SELECT LAST_NAME || ',' || JOB_ID AS "EMPLOYEE AND TITLE" FROM EMPLOYEES;
```

Below the query, there are tabs for Results, Explain, Describe, Saved SQL, and History. The Results tab is selected, displaying the output of the query:

EMPLOYEE AND TITLE
Johnson,HR01
Williams,SALES1
Smith,DEV02
Doe,DEV01

Below the table, it says "4 rows returned in 0.02 seconds" and has a "Download" link. The bottom of the screen shows the operating system taskbar with various icons and the Oracle APEX 24.2.0 application window title.

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 Oracle APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop' (selected), and 'Team Developer'. Below the bar, the 'SQL Commands' tab is active, with 'Schema' set to 'WKSP_JOWORKSAPCE'. The 'Language' dropdown is set to 'SQL'. The 'Rows' dropdown is set to '10'. There are buttons for 'Clear Command', 'Save', and 'Run'. A 'Find Tables' button is also present. The main area displays the results of a query named 'THE_OUTPUT'. The results show four rows of employee data, each consisting of a unique ID, first name, last name, department, and salary. The data is as follows:

THE_OUTPUT
1003,Alice,Johnson,HR01,50000
1004,Bob,Williams,SALES1,55000
1002,Jane,Smith,DEVO2,65000
1001,John,Doe,DEVO1,60000

Below the results, a message indicates '4 rows returned in 0.03 seconds' and a 'Download' link is available.

At the bottom left, there is a user profile icon and the text 'jothika.k.2024.oids@rajalekshmi', 'jo_worksapce', and 'en'. The bottom right corner shows 'Oracle APEX 24.2.8'.