

EXERCISE-1

Creating and Managing Tables


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1. Create the DEPT table based on the DEPARTMENT following the table instance chart below. Confirm that the table is created.

Column name	ID	NAME
Key Type		
Nulls/Unique		
FK Table		
FK Column		
Data Type	Number	Varchar2
Length	7	25

 APEX App Builder SQL Workshop Team Development Gallery

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

    A::

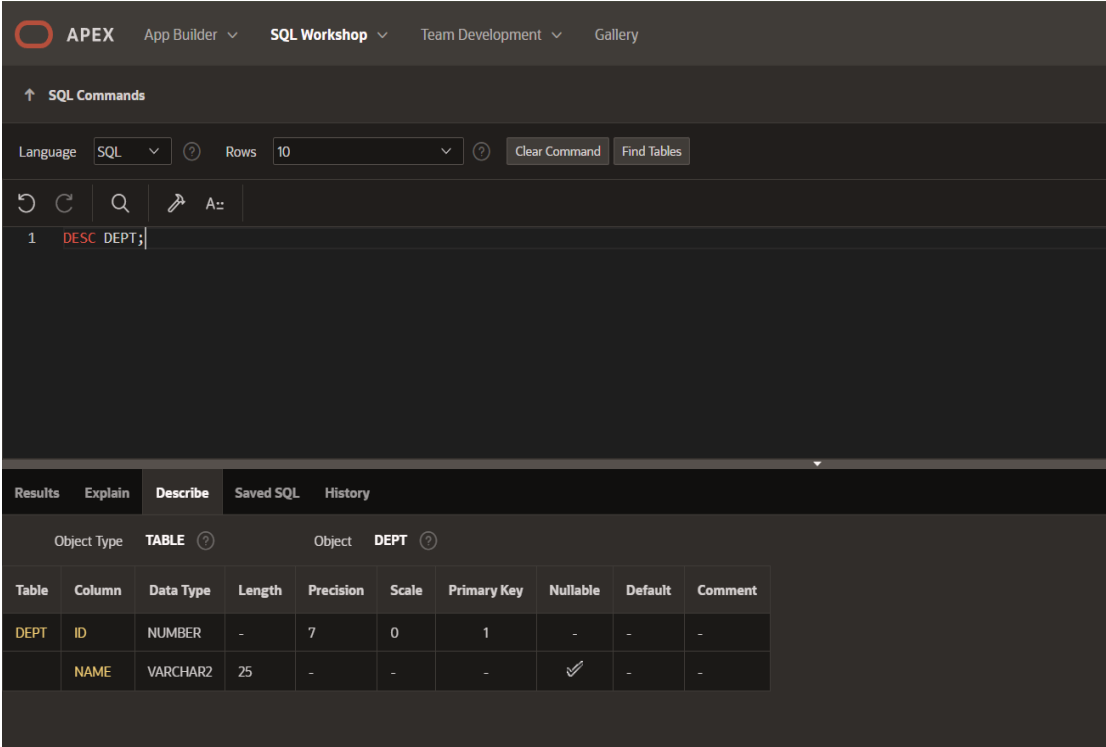
```
1 CREATE TABLE DEPT (  
2   ID NUMBER(7) PRIMARY KEY,  
3   NAME VARCHAR2(25)  
4 );
```

Results Explain Describe Saved SQL History

Table created.

0.07 seconds

To confirm the table creation:



2. Create the EMP table based on the following instance chart. Confirm that the table is created.

Column name	ID	LAST_NAME	FIRST_NAME	DEPT_ID
Key Type				
Nulls/Unique				
FK Table				
FK Column				
Data Type	Number	Varchar2	Varchar2	Number
Length	7	25	25	7

APEX

App Builder

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1CREATE TABLE EMP (

2ID NUMBER(7) PRIMARY KEY,

3LAST_NAME VARCHAR2(25),

4FIRST_NAME VARCHAR2(25),

5DEPT_ID NUMBER(7)

6);

Results

ExplainDescribeSaved SQLHistory

Table created.

0.06 seconds

To confirm the table creation:

APEX

App Builder

SQL Workshop

Team Development

Gallery

↑ SQL Commands

Language SQL Rows 10Clear CommandFind Tables

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1DESC EMP;

Results

Explain

Describe

Saved SQL

History

Object TypeTABLEObjectEMP

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP	ID	NUMBER	-	7	0	1	-	-	-
	LAST_NAME	VARCHAR2	25	-	-	-	✓	-	-
	FIRST_NAME	VARCHAR2	25	-	-	-	✓	-	-
	DEPT_ID	NUMBER	-	7	0	-	✓	-	-

3. Modify the EMP table to allow for longer employee last names. Confirm the modification. (Hint: Increase the size to 50)

APEX

App Builder

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SQL Commands

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A-Z

1 ALTER TABLE EMP

2 MODIFY (LAST_NAME VARCHAR2(50));

Results

Explain

Describe

Saved SQL

History

Table altered.

0.08 seconds

To confirm the modification:

APEX

App Builder

SQL Workshop

Team Development

Gallery

SQL Commands

Language SQL Rows 10 Clear Command Find Tables

A-Z

1 DESC EMP;

Results

Explain

Describe

Saved SQL

History

Object Type TABLE

Object EMP

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP	ID	NUMBER	-	7	0	1	-	-	-
	LAST_NAME	VARCHAR2	50	-	-	-	✓	-	-
	FIRST_NAME	VARCHAR2	25	-	-	-	✓	-	-
	DEPT_ID	NUMBER	-	7	0	-	✓	-	-

4. Create the EMPLOYEES2 table based on the structure of EMPLOYEES table. Include Only the Employee_id, First_name, Last_name, Salary and Dept_id columns. Name the columns Id, First_name, Last_name, salary and Dept_id respectively.

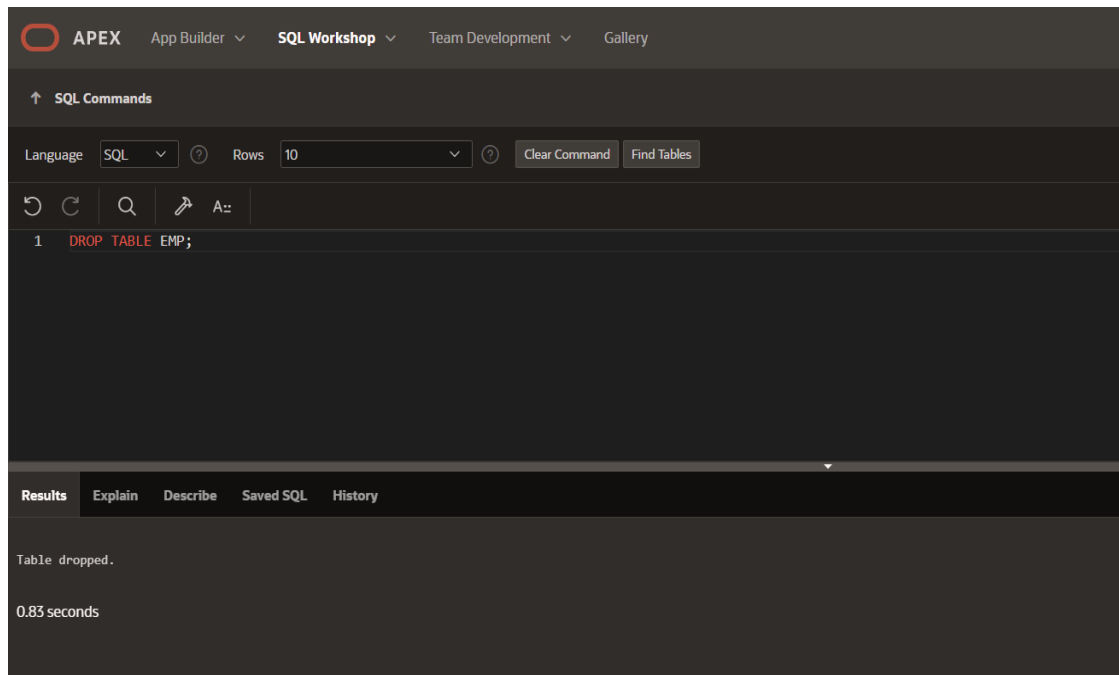
The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. The 'SQL Commands' section is active, showing a list of commands with line numbers 1 through 7. The command is: `CREATE TABLE EMPLOYEES2 (
 Id NUMBER(7),
 First_name VARCHAR2(25),
 Last_name VARCHAR2(50),
 Salary NUMBER(10,2),
 Dept_id NUMBER(7)
);`. Below the command editor, the 'Results' tab is selected, displaying the message 'Table created.' and the execution time '0.03 seconds'.

To confirm the table creation:

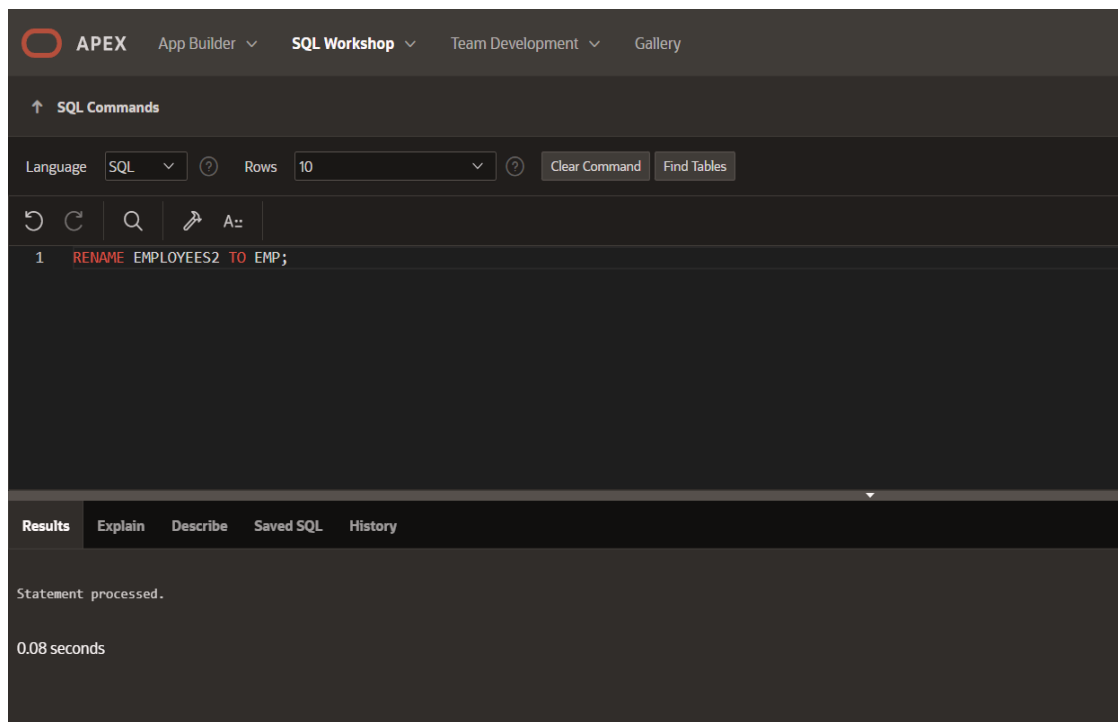
The screenshot shows the APEX SQL Workshop interface with the 'DESC EMPLOYEES2;' command entered in the SQL Commands section. The 'Results' tab is selected, showing the table description for 'EMPLOYEES2'. The table has 5 columns: ID, FIRST_NAME, LAST_NAME, SALARY, and DEPT_ID. The data types and constraints are as follows:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEES2	ID	NUMBER	-	7	0	-	✓	-	-
	FIRST_NAME	VARCHAR2	25	-	-	-	✓	-	-
	LAST_NAME	VARCHAR2	50	-	-	-	✓	-	-
	SALARY	NUMBER	-	10	2	-	✓	-	-
	DEPT_ID	NUMBER	-	7	0	-	✓	-	-

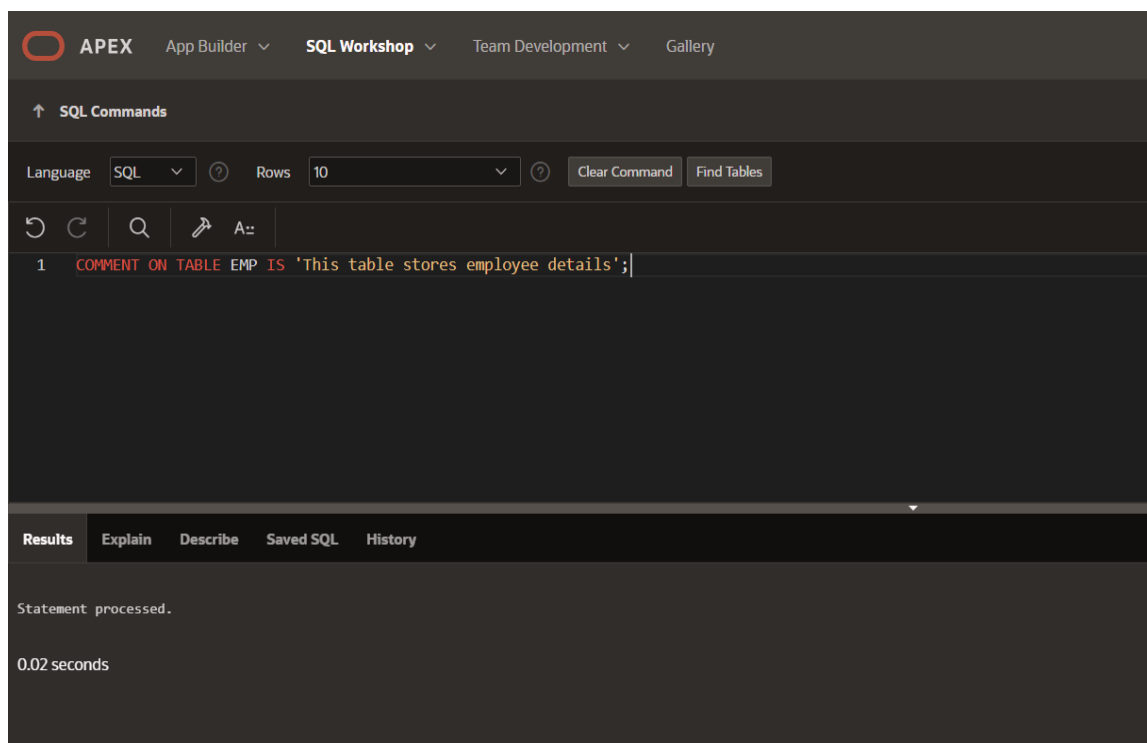
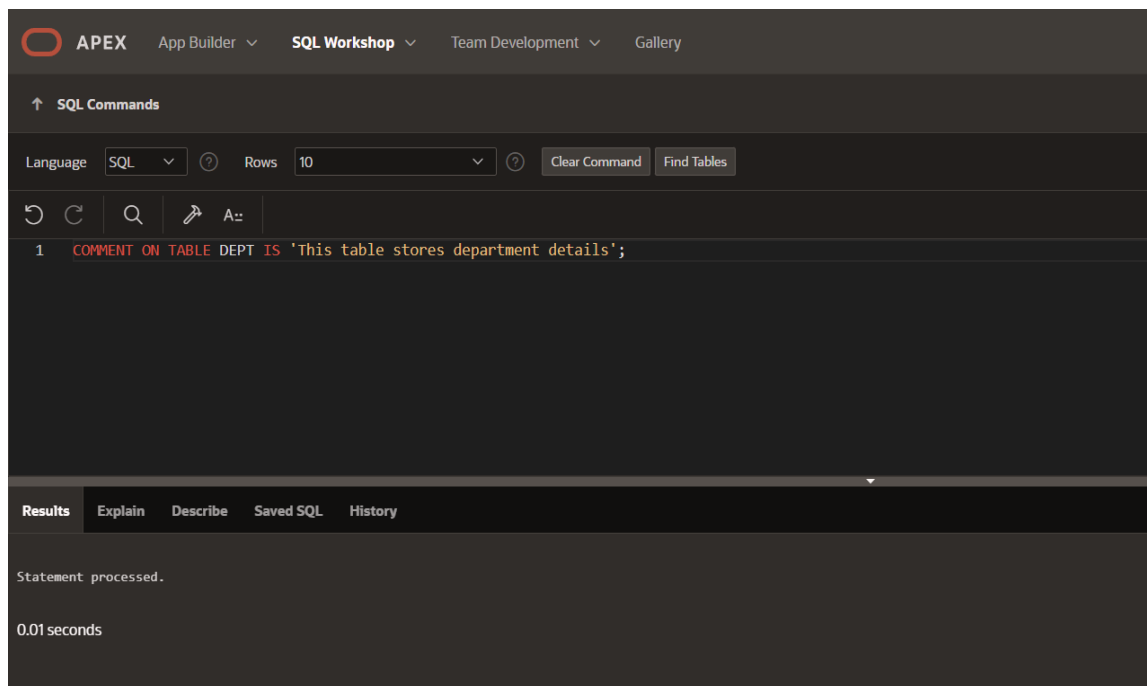
5. Drop the EMP table.



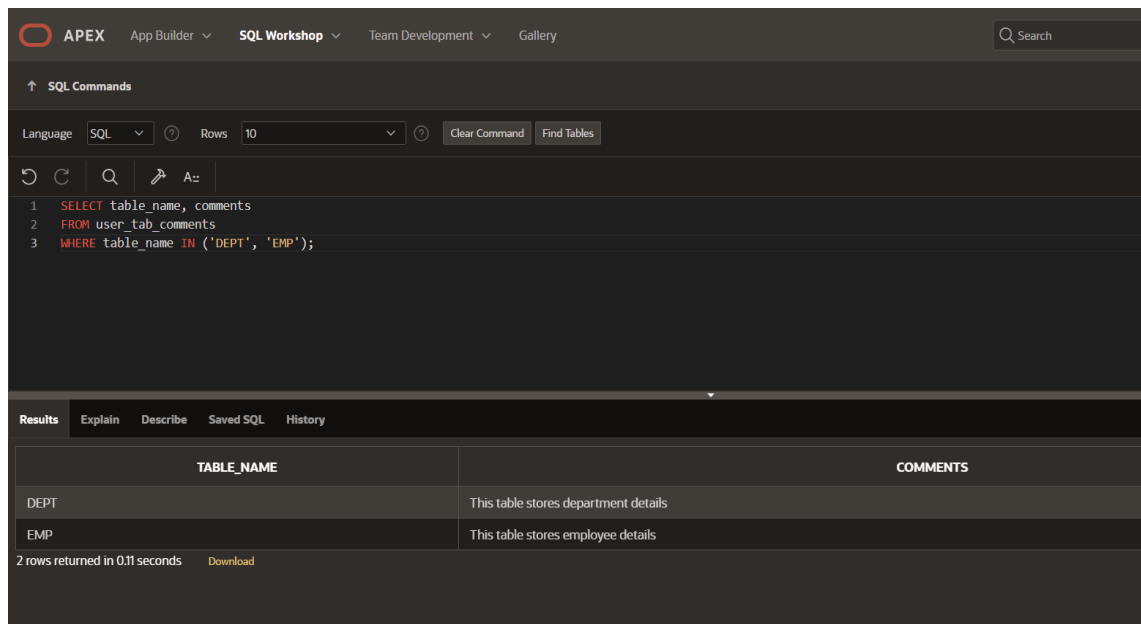
6. Rename the EMPLOYEES2 table as EMP.



7. Add a comment on DEPT and EMP tables. Confirm the modification by describing the table.



To confirm the comments:



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar is on the right. Below the navigation bar, the 'SQL Commands' section is active. The 'Language' is set to 'SQL' and 'Rows' is set to '10'. The SQL command entered is:

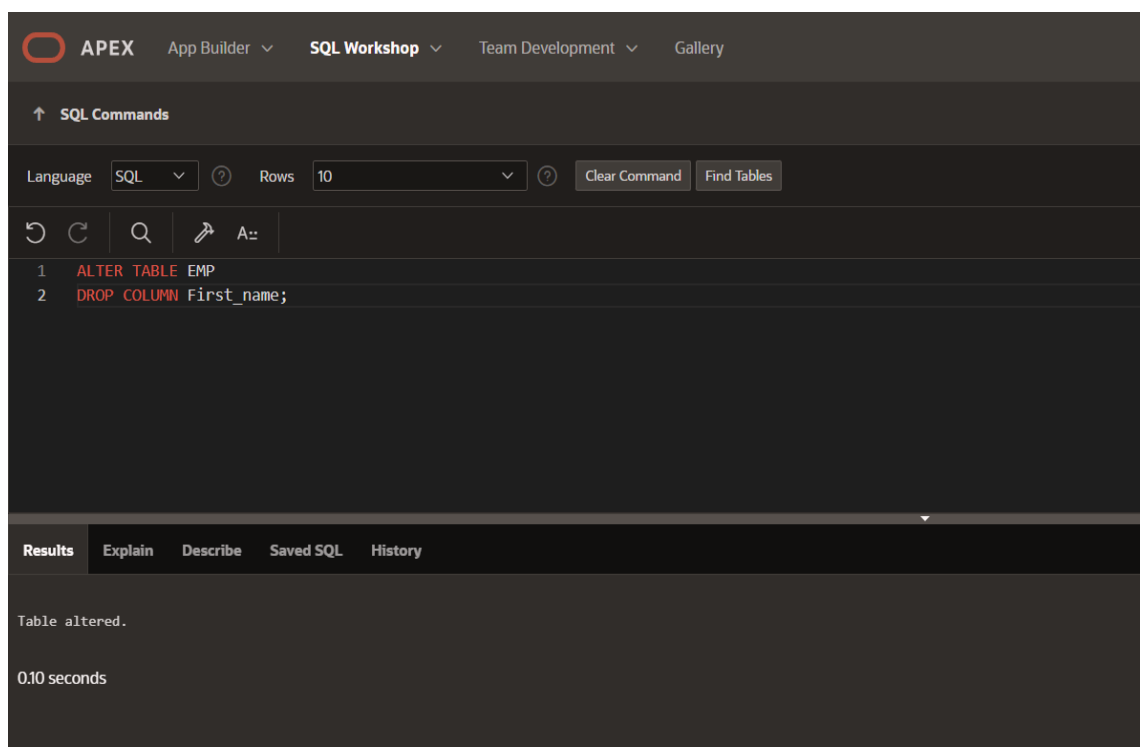
```
1 SELECT table_name, comments
2 FROM user_tab_comments
3 WHERE table_name IN ('DEPT', 'EMP');
```

The 'Results' tab is selected, showing a table with two columns: 'TABLE_NAME' and 'COMMENTS'. The table contains two rows of data:

TABLE_NAME	COMMENTS
DEPT	This table stores department details
EMP	This table stores employee details

Below the table, it states '2 rows returned in 0.11 seconds' and provides a 'Download' link.

8. Drop the First_name column from the EMP table and confirm it.



The screenshot shows the APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. A search bar is on the right. Below the navigation bar, the 'SQL Commands' section is active. The 'Language' is set to 'SQL' and 'Rows' is set to '10'. The SQL command entered is:

```
1 ALTER TABLE EMP
2 DROP COLUMN First_name;
```

The 'Results' tab is selected, showing the message 'Table altered.' and the execution time '0.10 seconds'.

To confirm the column is dropped:

APEX

App Builder

SQL Workshop

Team Development

Gallery

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

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1 DESC EMP;

Results Explain Describe Saved SQL History

Object Type TABLE Object EMP

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP	ID	NUMBER	-	7	0	-	✓	-	-
	LAST_NAME	VARCHAR2	50	-	-	-	✓	-	-
	SALARY	NUMBER	-	10	2	-	✓	-	-
	DEPT_ID	NUMBER	-	7	0	-	✓	-	-