



UNIVERSITY OF CHITTAGONG

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Oracle9i SQL-I

Chapter 9

Practice 9

1. Create the DEPT table based on the following table instance chart. Place the syntax in a script called `lab9_1.sql`, then execute the statement in the script to create the table. 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

Name	Null?	Type
ID		NUMBER(7)
NAME		VARCHAR2(25)

Solution:

```
1 CREATE TABLE dept (  
2     ID INT (7) ,  
3     NAME VARCHAR (25)  
4 );  
5  
6 DESCRIBE DEPT ;
```

Output:

#	Field	Type	Null
1	id	int	YES
2	name	varchar(25)	YES

2. Populate the DEPT table with data from the DEPARTMENTS table. Include only columns that you need.

Solution:

```
1 INSERT INTO dept  
2 SELECT department_id, department_name  
3 FROM departments ;
```

3. Create the EMP table based on the following table instance chart. Place the syntax in a script called `lab9_3.sql`, and then execute the statement in the script to create the table. Confirm that the table is created.

Solution:

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

Name	Null?	Type
ID		NUMBER(7)
LAST_NAME		VARCHAR2(25)
FIRST_NAME		VARCHAR2(25)
DEPT_ID		NUMBER(7)

```

1 CREATE TABLE emp(
2     id int (7),
3     last_name varchar(25),
4     first_name varchar(25),
5     dept_id int (7)
6 );
7
8 DESCRIBE emp;
```

Output:

#	Field	Type	Null
1	id	int	YES
2	last_name	varchar(30)	YES
3	first_name	varchar(25)	YES
4	dept_id	int	YES

4. Modify the EMP table to allow for longer employee last names. Confirm your modification.

Name	Null?	Type
ID		NUMBER(7)
LAST_NAME		VARCHAR2(50)
FIRST_NAME		VARCHAR2(25)
DEPT_ID		NUMBER(7)

Solution:

```

1 ALTER TABLE emp
2 MODIFY last_name VARCHAR(50);
3
4 DESCRIBE emp;
```

Output:

#	Field	Type	Null
1	id	int	YES
2	last_name	varchar(50)	YES
3	first_name	varchar(25)	YES
4	dept_id	int	YES

TABLE_NAME
DEPT
EMP

5. Confirm that both the DEPT and EMP tables are stored in the data dictionary.
(Hint: USER_TABLES)

Solution:

```
1 SELECT table_name
2 FROM information_schema.tables
3 WHERE table_name IN ('dept', 'emp');
```

Output:

#	TABLE_NAME
1	dept
2	emp

6. Create the EMPLOYEES2 table based on the structure of the EMPLOYEES table. Include only the EMPLOYEE_ID, FIRST_NAME, LAST_NAME, SALARY, and DEPARTMENT_ID columns. Name the columns in your new table ID, FIRST_NAME, LAST_NAME, SALARY, and DEPT_ID, respectively.

Solution:

```
1 CREATE TABLE employees2 AS
2 SELECT employee_id id, first_name, last_name, salary,
3        department_id dept_id
4 FROM employees;
```

7. Drop the EMP table.

Solution:

```
1 DROP TABLE emp;
```

8. Rename the EMPLOYEES2 table as EMP.

Solution:

```
1 RENAME TABLE employees2 TO emp;
```

9. Add a comment to the DEPT and EMP table definitions describing the tables. Confirm your additions in the data dictionary.

Solution:

```
1 ALTER TABLE dept
2 COMMENT = 'This table stores department information';
3
4 ALTER TABLE emp
5 COMMENT = 'This table stores employee information';
6
7 SELECT table_name, table_comment
8 FROM information_schema.tables
9 WHERE table_name IN ('dept', 'emp');
```

Output:

#	TABLE_NAME	TABLE_COMMENT
1	dept	This table stores department information
2	emp	This table stores employee information

10. Drop the FIRST_NAME column from the EMP table. Confirm your modification by checking the description of the table.

Solution:

```
1 ALTER TABLE emp
2 DROP COLUMN first_name;
3
4 DESCRIBE emp;
```

Output:

#	Field	Type	Null
1	id	int unsigned	NO
2	first_name	varchar(20)	YES
3	salary	decimal(8,2)	NO
4	dept_id	int unsigned	YES

11. In the EMP table, mark the DEPT_ID column as UNUSED. Confirm your modification by checking the description of the table.

Solution:

```
1 ALTER TABLE emp
2 SET UNUSED COLUMN dept_id;
3
4 DESCRIBE emp;
```