



**RAJALAKSHMI  
ENGINEERING COLLEGE**

AN AUTONOMOUS INSTITUTION  
AFFILIATED TO ANNA UNIVERSITY, CHENNAI

## BONAFIDE CERTIFICATE

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ACADEMIC YEAR 2025-26 SEMESTER 3 BRANCH BE CSE CS

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Certified that this is the bonafide record of work done by the above student in the

Database Management Laboratory during the year 2025 - 2026

System  
(CS2332)

Signature of Faculty - in - Charge

Submitted for the Practical Examination held on .....

Internal Examiner

External Examiner



## EXERCISE-1 Creating and Managing Tables

### OBJECTIVE

After the completion of this exercise, students should be able to do the following:

- Create tables
- Describing the data types that can be used when specifying column definition
- Alter table definitions
- Drop, rename, and truncate tables

### NAMING RULES

Table names and column names:

- Must begin with a letter
- Must be 1-30 characters long
- Must contain only A-Z, a-z, 0-9, \_, \$, and #
- Must not duplicate the name of another object owned by the same user
- Must not be an oracle server reserve words
- 2 different tables should not have same name.
- Should specify a unique column name.
- Should specify proper data type along with width
- Can include "not null" condition when needed. By default it is 'null'.

### The CREATE TABLE Statement

**Table:** Basic unit of storage; composed of rows and columns

**Syntax: 1** Create table table\_name (column\_name1 data\_type (size)  
column\_name2 data\_type (size)...);

**Syntax: 2** Create table table\_name (column\_name1 data\_type (size) constraints,  
column\_name2 data\_type constraints ...);

#### Example:

Create table employees ( employee\_id number(6), first\_name varchar2(20), ..job\_id varchar2(10),  
CONSTRAINT emp\_emp\_id\_pk PRIMARY KEY (employee\_id));

### Tables Used in this course

#### Creating a table by using a Sub query

#### **SYNTAX**

// CREATE TABLE table\_name(column\_name type(size)...);

Create table table\_name as select column\_name1,column\_name2,.....colmn\_namen from  
table\_name where predicate;

#### **AS Subquery**



Subquery is the select statement that defines the set of rows to be inserted into the new table.

### Example

Create table dept80 as select employee\_id, last\_name, salary\*12 Annsal, hire\_date  
from employees where dept\_id=80;

### The ALTER TABLE Statement

The ALTER statement is used to

- Add a new column
- Modify an existing column
- Define a default value to the new column
- Drop a column
- To include or drop integrity constraint.

### SYNTAX

ALTER TABLE table\_name ADD /MODIFY(Column\_name type(size));

ALTER TABLE table\_name DROP COLUMN (Column\_name);

*ALTER TABLE ADD CONSTRAINT Constraint\_name PRIMARY KEY (Column\_Name);*

### Example:

Alter table dept80 add (job\_id varchar2(9));

Alter table dept80 modify (last\_name varchar2(30));

Alter table dept80 drop column job\_id;

**NOTE:** Once the column is dropped it cannot be recovered.

### DROPPING A TABLE

- All data and structure in the table is deleted.
- Any pending transactions are committed.
- All indexes are dropped.
- Cannot roll back the drop table statement.

### Syntax:

Drop table *tablename*;

### Example:

Drop table dept80;

### RENAMING A TABLE

To rename a table or view.

### Syntax

RENAME old\_name to new\_name



**Example:**

Rename dept to detail\_dept;

**TRUNCATING A TABLE**

Removes all rows from the table.

Releases the storage space used by that table.

**Syntax**

TRUNCATE TABLE *table\_name*;

**Example:**

TRUNCATE TABLE copy\_emp;

**Find the Solution for the following:**

Create the following tables with the given structure.

**EMPLOYEES TABLE**

NAME	NULL?	TYPE
Employee_id	Not null	Number(6)
First Name		Varchar(20)
Last Name	Not null	Varchar(25)
Email	Not null	Varchar(25)
Phone Number		Varchar(20)
Hire date	Not null	Date
Job_id	Not null	Varchar(10)
Salary		Number(8,2)
Commission pct		Number(2,2)
Manager_id		Number(6)
Department_id		Number(4)

**DEPARTMENT TABLE**

NAME	NULL?	TYPE
Dept_id	Not null	Number(6)
Dept_name	Not null	Varchar(20)
Manager_id		Number(6)
Location_id		Number(4)

**JOB\_GRADE TABLE**

NAME	NULL?	TYPE
Grade level		Varchar(2)
Lowest sal		Number



Highest_sal	Number
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## LOCATION TABLE

NAME	NULL?	TYPE
Location_id	Not null	Number(4)
St_addr		Varchar(40)
Postal_code		Varchar(12)
City	Not null	Varchar(30)
State_province		Varchar(25)
Country_id		Char(2)

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

```
Create table DEPT ( ID integer,
                    name Varchar(25));
```

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

```
Create table EMP ( ID integer, first_name Varchar(25),
                  last_name(25),
                  dept-ID integer);
```

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

```
Alter table EMP modify last_name Varchar(50);
```



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.

```
Create table EMPLOYEES (employee_id integer,  
first_name varchar(25), last_name varchar(25),  
salary integer, dept_id integer);
```

5. Drop the EMP table.

```
drop TABLE emp;
```

6. Rename the EMPLOYEES2 table as EMP.

```
Alter table EMPLOYEES RENAME to EMP;
```

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

```
Alter table DEPT COMMENT = 'Department details';  
Alter table EMP COMMENT = 'Employee details';
```

8. Drop the First\_name column from the EMP table and confirm it.

```
Alter table EMP drop first_name;
```

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	