Ex.No.: 4	
ate:	13/8/24

Object Type TABLE Object EMP

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>EMP</u>	<u>ID</u>	NUMBER	-	6	0	1	-	-	-
	LAST_NAME	VARCHAR2	25	-	-	-	-	-	-
	SALARY	NUMBER	-	8	2	-	~	-	-
	DEPARTMENT_ID	NUMBER	-	4	0	-	~	-	-
								1	- 4

Object Type TABLE Object DEPT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPT	<u>ID</u>	NUMBER	-	7	0	-	~	-	-
	<u>NAME</u>	VARCHAR2	25	-	-	-	~	-	-
								1	- 2

1. Add a table-level PRIMARY KEY constraint to the EMP table on the ID column. The constraint should be named at creation. Name the constraint my\_emp\_id\_pk.

ALTER TABLE EMP ADD CONSTRAINT my\_emp\_id\_pk PRIMARY KEY (ID);

Object Type TABLE Object EMP Column Data Type Length Precision Scale Primary Key Nullable Default Comment Table 6 0 1 EMP ID NUMBER LAST\_NAME VARCHAR2 25 2 SALARY NUMBER 8 DEPARTMENT\_ID NUMBER 4 0 1 - 4

2. Create a PRIMAY KEY constraint to the DEPT table using the ID colum. The constraint should be named at creation. Name the constraint my\_dept\_id\_pk.

ALTER TABLE DEPT ADD CONSTRAINT my\_dept\_id\_pk PRIMARY KEY (ID);

Object Type TABLE Object DEPT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPT	<u>ID</u>	NUMBER	-	7	0	1	-	-	-
	<u>NAME</u>	VARCHAR2	25	-	-	-	~	-	-
								1	- 2

3. Add a column DEPT\_ID to the EMP table. Add a foreign key reference on the EMP table that ensures that the employee is not assigned to nonexistent department. Name the constraint my\_emp\_dept\_id\_fk.

ALTER TABLE EMP ADD DEPT\_ID NUMBER(6);

Object T	ype TABLE Object E	EMP							
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP	<u>ID</u>	NUMBER	-	6	0	1	-	-	-
	LAST_NAME	VARCHAR2	25	-	-	-	-	-	-
	SALARY	NUMBER	-	8	2	-	~	-	-
	DEPARTMENT_ID	NUMBER	-	4	0	-	~	-	-
	DEPT_ID	NUMBER	-	6	0	-	~	-	-
								1	- 5

ALTER TABLE EMP ADD CONSTRAINT my\_emp\_dept\_id\_fk FOREIGN KEY (DEPT\_ID) REFERENCES DEPT(ID);

4. Modify the EMP table. Add a COMMISSION column of NUMBER data type, precision 2, scale 2. Add a constraint to the commission column that ensures that a commission value is greater than zero.

ALTER TABLE EMP ADD COMMISSION NUMBER(2, 2) CHECK (COMMISSION > 0);

Object Type TABLE Object EMP									
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP	<u>ID</u>	NUMBER	-	6	0	1	-	-	-
	LAST_NAME	VARCHAR2	25	-	-	-	-	-	-
	SALARY	NUMBER	-	8	2	-	~	-	-
	DEPARTMENT_ID	NUMBER	-	4	0	-	~	-	-
	DEPT_ID	NUMBER	-	6	0	-	~	-	-
	COMMISSION	NUMBER	-	2	2	-	~	-	-
								1	- 6

ID	LAST_NAME	SALARY	DEPARTMENT_ID	DEPT_ID	COMMISSION
101	Austin	5000	60	-	-
102	Smith	4500	60	-	-
103	Jones	4800	70	-	-
104	Davis	5300	80	-	-
105	Austin	3000	60	-	-