EX NO: 04   **WORKING WITH CONSTRAINTS DATE**
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Find the Solution for the following:

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 **EMPSS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPSS	NAME	VARCHAR2	50	-	-	-	✓	-	-
	ID	NUMBER	22	-	-	1	-	-	-
									1 - 2

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 **DEPTS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPTS	NAME	VARCHAR2	50	-	-	-	✓	-	-
	ID	NUMBER	22	-	-	1	-	-	-
									1 - 2

3. Add a column DEPT_ID to the EMP table.

ALTER TABLE EMPSS
ADD DEPT_ID NUMBER;

Object Type **TABLE** Object **EMPSS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPSS	NAME	VARCHAR2	50	-	-	-	✓	-	-
	ID	NUMBER	22	-	-	1	-	-	-
	DEPT_ID	NUMBER	22	-	-	-	✓	-	-
									1 - 3

Add a foreign key reference on the EMP table that ensures that the employee is not assigned to nonexistent deparment. Name the constraint my_emp_dept_id_fk.

ALTER TABLE EMPSS
ADD CONSTRAINT my_emp_dept_id_fk
FOREIGN KEY (DEPT_ID)
REFERENCES DEPTS(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);

Object Type **TABLE** Object **EMPSS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPSS	NAME	VARCHAR2	50	-	-	-	✓	-	-
	ID	NUMBER	22	-	-	1	-	-	-
	DEPT_ID	NUMBER	22	-	-	-	✓	-	-
	COMMISSION	NUMBER	-	2	2	-	✓	-	-
									1 - 4

ALTER TABLE EMP ADD CONSTRAINT chk_commission_positive CHECK (COMMISSION > 0);

Object Type **TABLE** Object **EMPSS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPSS	NAME	VARCHAR2	50	-	-	-	✓	-	-
	ID	NUMBER	22	-	-	1	-	-	-
	DEPT_ID	NUMBER	22	-	-	-	✓	-	-
	COMMISSION	NUMBER	-	2	2	-	✓	-	-
									1 - 4