WORKING WITH CONSTRAINTS

EXPERIMENT:4

DATE:14-08-2024

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.

CREATE TABLE EMP2 (
ID NUMBER(7),
LAST_NAME VARCHAR2(25) NOT NULL,
FIRST_NAME VARCHAR2(25) NOT NULL,
CONSTRAINT my_emp_id_pk PRIMARY KEY (ID));

Object Type TABLE Object EMP2

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP2	ID	NUMBER	-	7	0	1	-	-	-
	LAST_NAME	VARCHAR2	25	-	-	-	-	-	-
	FIRST_NAME	VARCHAR2	25	-	-	-	-	-	-
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2. Create a PRIMAY KEY constraint to the DEPT table using the ID column. The constraint

should be named at creation. Name the constraint my_dept_id_pk.

CREATE TABLE DEPT2(
ID NUMBER(7) NOT NULL,
DEPT_NAME VARCHAR2(50),
CONSTRAINT my_dept_id_pk PRIMARY KEY (ID));

Object Type TABLE Object DEPT2

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPT2	ID	NUMBER	-	7	0	1	-	-	-
	DEPT_NAME	VARCHAR2	50	-	-	-	✓	-	-
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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 deparment. Name the constraint

my_emp_dept_id_fk.

ALTER TABLE EMP2
ADD DEPT_ID NUMBER(7);
ALTER TABLE
ADD CONSTRAINT my_emp_dept_id_fk FOREIGN KEY (DEPT_ID)
REFERENCES DEPT2(ID);

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
SYS_C008241	Check	"LAST_NAME" IS NOT NULL	-	-	-	ENABLED	08/21/2024 08:51:44 AM	-	-
SYS_C008242	Check	"FIRST_NAME" IS NOT NULL	-	-	-	ENABLED	08/21/2024 08:51:44 AM	-	-
MY_EMP_ID_PK	Primary	-	-	ID	-	ENABLED	08/21/2024 08:51:44 AM	MY_EMP_ID_PK	-
MY_EMP_DEPT_ID_FK	Foreign	-	037.DEPT2.MY_DEPT_ID_PK	DEPT_ID	NO ACTION	ENABLED	08/21/2024 09:04:46 AM	-	-
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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 EMP2
ADD COMMISSION NUMBER(2, 2);
ALTER TABLE EMP2
ADD CONSTRAINT check_commission_positive CHECK (COMMISSION > 0);

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
SYS_C008241	Check	"LAST_NAME" IS NOT NULL	-	-	-	ENABLED	08/21/2024 08:51:44 AM	-	-
SYS_C008242	Check	"FIRST_NAME" IS NOT NULL	-	-	-	ENABLED	08/21/2024 08:51:44 AM	-	-
MY_EMP_ID_PK	Primary	-	-	ID	-	ENABLED	08/21/2024 08:51:44 AM	MY_EMP_ID_PK	-
MY_EMP_DEPT_ID_FK	Foreign	-	037.DEPT2.MY_DEPT_ID_PK	DEPT_ID	NO ACTION	ENABLED	08/21/2024 09:04:46 AM	-	-
CHECK_COMMISSION_POSITIVE	Check	COMMISSION > 0	-	-	-	ENABLED	08/21/2024 09:08:31 AM	-	-
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