DBMS LAB 1

Consider the Insurance database given below. The primary keys are underlined and the data types are specified.

- PERSON (driver-id #: String, name: String, address: String)
- CAR (Regno: String, model: String, year: int)
- ACCIDENT (report-number: int, adate: date, location: String)
- OWNS (driver-id #: String, Regno: String)
- PARTICIPATED (driver-id: String, Regno: String, report-number: int, damage-amount: int)
- i. Create the above tables by properly specifying the primary keys and the foreign keys.
- ii. Enter at least five tuples for each relation.
- iii. Demonstrate how you
- a. Update the damage amount for the car with a specific Regno in the accident with report number 12 to 25000.
- b. Add a new accident to the database.
- iv. Find the total number of people who owned cars that involved in accidents in 2008.
- v. Find the number of accidents in which cars belonging to a specific model were involved.

CREATE DATABASE Insurance_database; USE Insurance_database; SHOW TABLES;

CREATE TABLE PERSON(driver_id VARCHAR(20),dname VARCHAR(20),address VARCHAR(40),PRIMARY KEY(driver_id));
DESC PERSON;

CREATE TABLE CAR(regno VARCHAR(10), model VARCHAR(10), year INT , PRIMARY KEY(regno));
DESC CAR;

CREATE TABLE ACCIDENT(report_no INT,adate date,location VARCHAR(20),PRIMARY KEY(report_no)); DESC ACCIDENT;

CREATE TABLE OWNS(driver_id VARCHAR(10),regno VARCHAR(10),PRIMARY KEY(driver_id,regno),foreign key(driver_id) references PERSON(driver_id) on delete cascade,foreign key(regno) references CAR(regno) on delete cascade);

CREATE TABLE PARTICIPATED(driver_id VARCHAR(10),regno VARCHAR(10),report_no INT,damage_amt float, foreign key (driver_id,regno) references OWNS(driver_id,regno)ON DELETE CASCADE,foreign key (REPORT_NO) references ACCIDENT(REPORT_NO) ON DELETE CASCADE); DESC PARTICIPATED;

INSERT INTO PERSON VALUES('11','P1','Add1');

commit; SELECT* FROM PERSON; INSERT INTO PERSON VALUES('22','P2','Add2'); INSERT INTO PERSON VALUES('33','P3','Add3'); INSERT INTO PERSON VALUES('44','P4','Add4'); INSERT INTO PERSON VALUES('55','P5','Add5'); commit;

INSERT INTO CAR VALUES('Reg1','Model1', 2000); INSERT INTO CAR VALUES('Reg2', 'Model2', 2000); INSERT INTO CAR VALUES('Reg3',' Model3',1999); INSERT INTO CAR VALUES('Reg4', 'Model1', 2002); INSERT INTO CAR VALUES('Reg5', 'Model4', 2002); commit;

SELECT * FROM CAR;

INSERT INTO ACCIDENT VALUES(12,'2002-06-01', 'Loc1'); INSERT INTO ACCIDENT VALUES(200, '2002-12-10', 'Loc2'); INSERT INTO ACCIDENT VALUES(300, '1999-07-23', 'Loc1'); INSERT INTO ACCIDENT VALUES(25000, '2000-06-11', 'Loc3'); INSERT INTO ACCIDENT VALUES(26500, '2001-10-16', 'Loc4'); commit;

SELECT * FROM ACCIDENT;

INSERT INTO OWNS VALUES('11','Reg1'); INSERT INTO OWNS VALUES('11', 'Reg2');

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INSERT INTO OWNS VALUES('22', 'Reg3');
INSERT INTO OWNS VALUES('33', 'Reg4');
INSERT INTO OWNS VALUES('44', 'Reg5');
commit;
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SELECT * FROM OWNS;

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INSERT INTO PARTICIPATED VALUES('11', 'Reg1', 12 ,20000);
INSERT INTO PARTICIPATED VALUES('22', 'Reg3', 200, 500);
INSERT INTO PARTICIPATED VALUES('33', 'Reg4', 300, 10000);
INSERT INTO PARTICIPATED VALUES('44', 'Reg5', 25000 ,2375);
INSERT INTO PARTICIPATED VALUES('11', 'Reg2', 26500 ,70000);
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UPDATE PARTICIPATED SET DAMAGE_AMT=25000 WHERE REPORT_NO =12 AND REGNO='Reg1'; SELECT * FROM PARTICIPATED;

SELECT count(*) FROM ACCIDENT WHERE Adate like '2002--';
SELECT count(A.Report_no) FROM ACCIDENT A, PARTICIPATED P, CAR C WHERE
A.Report_no=P.Report_no AND P.Regno=C.Regno AND C.Model="Model1";

