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1BM20CS400

CSE-4A

PROGRAM 1: INSURANCE DATABASE

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)

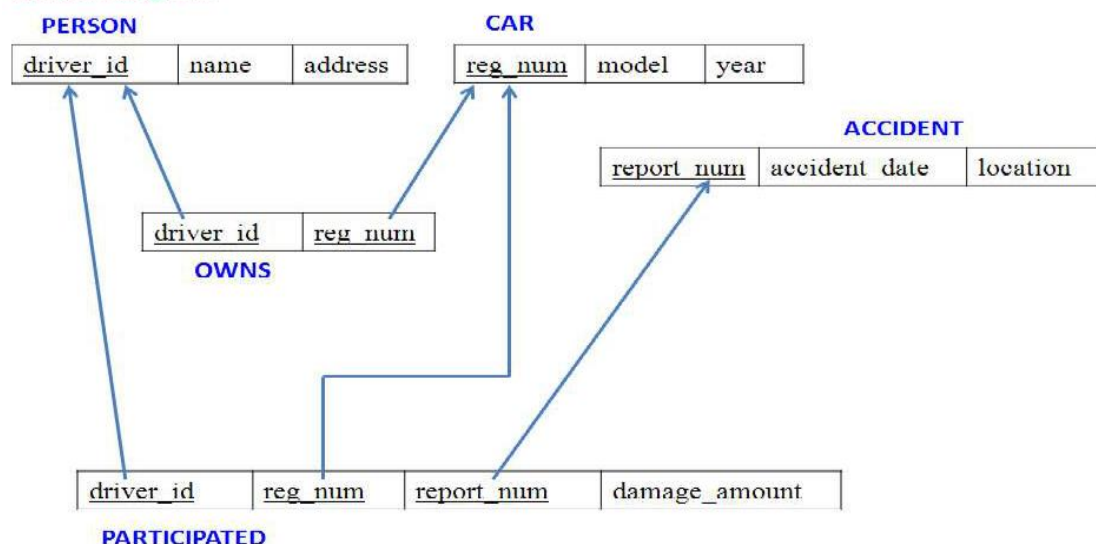
ACCIDENT (report-number: int, date: date, location: String)

OWNS (driver-id #: String, Regno: String)

PARTICIPATED (driver-id: String, Regno: String, report-number: int, damage-amount: int)

- Create the above tables by properly specifying the primary keys and the foreign keys.
- Enter at least five tuples for each relation.
- Demonstrate how you
 - Update the damage amount for the car with a specific Regno in the accident with report number 12 to 25000.
 - Add a new accident to the database.
- Find the total number of people who owned cars that involved in accidents in 2008.
- Find the number of accidents in which cars belonging to a specific model were involved

Schema diagram



1. Create the above tables by properly specifying the primary keys and the foreign keys.

```
CREATE DATABASE Insurance;
```

```
USE Insurance;
```

```
CREATE TABLE PERSON (  
  DRIVER_ID VARCHAR(15),  
  NAME VARCHAR(30) NOT NULL,  
  ADDRESS VARCHAR(30),  
  PRIMARY KEY(DRIVER_ID)  
);
```

```
CREATE TABLE CAR(  
  REG_NUM VARCHAR(15),  
  MODEL VARCHAR(15),  
  YEAR INT,  
  PRIMARY KEY (REG_NUM)  
);
```

```
CREATE TABLE ACCIDENT(  
  REPORT_NUM INT,  
  ACCIDENT_DATE DATE,  
  LOCATION VARCHAR(30),  
  PRIMARY KEY (REPORT_NUM)  
);
```

```
CREATE TABLE OWNS(  
  DRIVER_ID VARCHAR(15),  
  REG_NUM VARCHAR(15),  
  FOREIGN KEY (DRIVER_ID) REFERENCES PERSON(DRIVER_ID),  
  FOREIGN KEY (REG_NUM) REFERENCES CAR(REG_NUM)  
);
```

```

CREATE TABLE PARTICIPATED(
DRIVER_ID VARCHAR(15),
REG_NUM VARCHAR(15),
REPORT_NUM INT,
DAMAGE_AMOUNT INT,
FOREIGN KEY (DRIVER_ID) REFERENCES PERSON(DRIVER_ID),
FOREIGN KEY (REG_NUM) REFERENCES CAR(REG_NUM),
FOREIGN KEY (REPORT_NUM) REFERENCES ACCIDENT(REPORT_NUM)
);

```

2. Enter at least five tuples for each relation.

```

INSERT INTO PERSON
VALUES("A01","Richard","Srinivas Nagar"),("A02","Pradeep","Rajaji Nagar"),
("A03","Smith","Ashok Nagar"),("A04","Venu","N R Colony"),("A05","Jhon","Hanumanth Nagar");
SELECT * FROM PERSON;

```

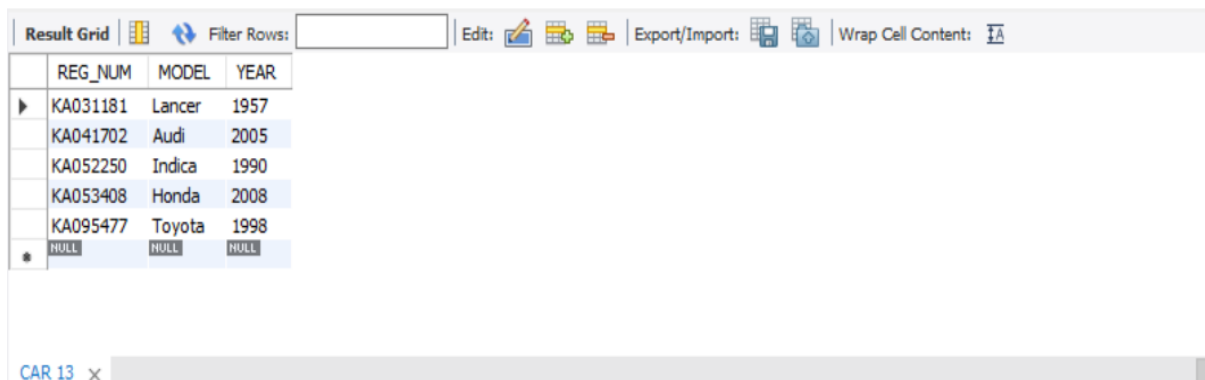
Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
DRIVER_ID	NAME	ADDRESS		
A01	Richard	Srinivas Nagar		
A02	Pradeep	Rajaji Nagar		
A03	Smith	Ashok Nagar		
A04	Venu	N R Colony		
A05	Jhon	Hanumanth Nagar		
NULL	NULL	NULL		

```

INSERT INTO CAR
VALUES("KA052250","Indica",1990),("KA031181","Lancer",1957),("KA095477","Toyota",1998),
("KA053408","Honda",2008),("KA041702","Audi",2005);

```

SELECT * FROM CAR;



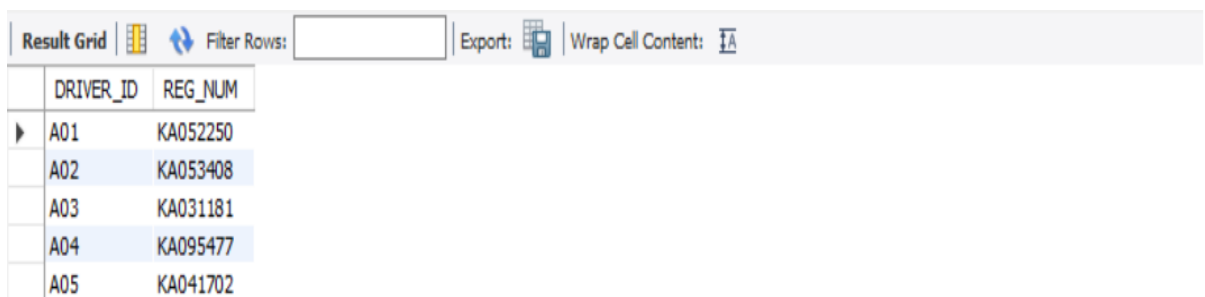
	REG_NUM	MODEL	YEAR
▶	KA031181	Lancer	1957
	KA041702	Audi	2005
	KA052250	Indica	1990
	KA053408	Honda	2008
	KA095477	Toyota	1998
*	NULL	NULL	NULL

CAR 13 x

INSERT INTO OWNS

VALUES("A01","KA052250"),("A02","KA053408"),("A03","KA031181"),("A04","KA095477"),("A05","KA041702");

SELECT * FROM OWNS;

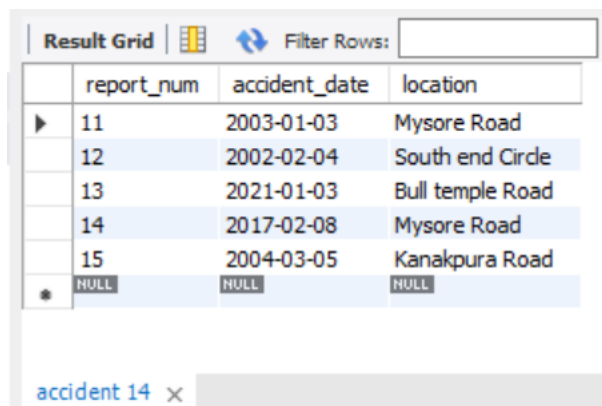


	DRIVER_ID	REG_NUM
▶	A01	KA052250
	A02	KA053408
	A03	KA031181
	A04	KA095477
	A05	KA041702

INSERT INTO ACCIDENT

VALUES(11,'2003-01-01',"Mysore Road"),(12,'2004-02-02',"South end Circle"),(13,'2003-01-21',"Bull Temple Road"),(14,'2008-02-17',"Mysore Road"),(15,'2005-03-04',"Kanakpura Road");

SELECT * FROM ACCIDENT;



	report_num	accident_date	location
▶	11	2003-01-03	Mysore Road
	12	2002-02-04	South end Circle
	13	2021-01-03	Bull temple Road
	14	2017-02-08	Mysore Road
	15	2004-03-05	Kanakpura Road
*	NULL	NULL	NULL

accident 14 x

INSERT INTO PARTICIPATED VALUES

("A01","KA052250",11,10000),("A02","KA053408",12,50000),("A03","KA031181",13,25000),("A04","KA095477",14,3000),

("A05","KA041702",15,5000);

SELECT * FROM PARTICIPATED;

	DRIVER_ID	REG_NUM	REPORT_NUM	DAMAGE_AMOUNT
▶	A01	KA052250	11	10000
	A02	KA053408	12	50000
	A03	KA031181	13	25000
	A04	KA095477	14	3000
	A05	KA041702	15	5000




PARTICIPATED 3 ×

- a) Update the damage amount to 25000 for the car with a specific reg-num (example 'KA053408') for which the accident report number was 12.

UPDATE PARTICIPATED

SET DAMAGE_AMOUNT=25000

WHERE REG_NUM="KA053408";

Result Grid |  Filter Rows: | Export:  | Wrap Cell Content: 

	DRIVER_ID	REG_NUM	REPORT_NUM	DAMAGE_AMOUNT
▶	A01	KA052250	11	10000
	A02	KA053408	12	25000
	A03	KA031181	13	25000
	A04	KA095477	14	3000
	A05	KA041702	15	5000







PARTICIPATED 16 ×

- b) Add a new accident to the database.

INSERT INTO ACCIDENT



VALUES (16,"2009-05-12","Belagavi");

SELECT * FROM ACCIDENT;

Result Grid			
Filter Rows: <input type="text"/>			
Edit:   			
Export/Import:  			
Wrap Cell Content: 			
	REPORT_NUM	ACCIDENT_DATE	LOCATION
▶	11	2003-01-01	Mysore Road
	12	2004-02-02	South end Circle
	13	2003-01-21	Bull Temple Road
	14	2008-02-17	Mysore Road
	15	2005-03-04	Kanakpura Road
	16	2009-05-12	Belagavi
✱	NULL	NULL	NULL



ACCIDENT 15 x

SELECT COUNT(ACCIDENT_DATE) AS ACCIDENTS2008 FROM ACCIDENT
WHERE YEAR(ACCIDENT_DATE)=2008;

Result Grid	
Filter Rows: <input type="text"/>	
Export: 	
Wrap Cell Content: 	
	ACCIDENTS2008
▶	1

Result 17 x

SELECT COUNT(MODEL) AS INDICA FROM car
WHERE MODEL="Indica";

Result Grid	
Filter Rows: <input type="text"/>	
Export: 	
Wrap Cell Content: 	
	INDICA
▶	1

Result 18 x