CS & IT



ENGINERING

Database Management

DPP 02 Discussion Notes





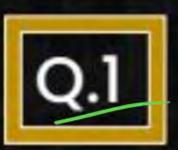
By-Vijay Agarwal sir



TOPICS TO BE COVERED

01 Question

02 Discussion

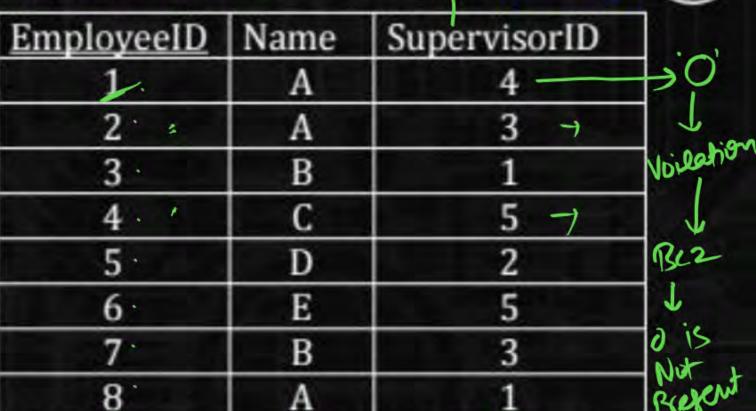


Consider the following relation Supervision(EmployeeID, Name, SupervisorID)pertaining to a company's database:

The key SupervisorID acts as a Foreign key in the relation Supervision.

The following operations are performed on the relation:

Suk	erv	isi	on
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Insert a new employee having EmployeeID=='9'and Name = A and SupervisorID as '1';

Set SupervisorID as 'NULL' where EmployeeID==2 OR EmployeeID==4;

III: Set SupervisorID as '0' where EmployeeID==1; Which of the above operation(s) is/are ALLOWED?





only B.

I and II only



III only



I and III only

Referencing Relation

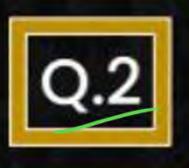
(Foreign tem)

Attribute respend in Referencing Relation

Must be fresent in Referenced Relation

foreign tey May Contain Dublicates of

Null Value



Consider the following statements:



P: At most one foreign key is possible for a relational schema.

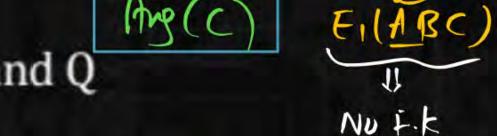
Q: A foreign key declaration can always be replaced by an equivalent check assertion in SQL.

Which of the following is/are INCORRECT?



- A. Ponly
- B. Q only

Both P and Q



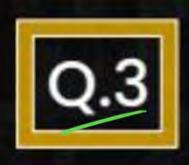
R(AD) EZ(DEF) 2 Foreign key No F.k

D. Neither P nor Q

Check affection in sql

3 Table

F.K May Contain Null. & Duplicate.



Consider the relations-



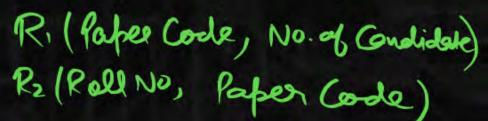
Two relations are given as R_1 (PaperCode, NumberofCandidates) and R_2 (RollNo, Papercode). Assume that each roll no must have only one papercode but one paper can be chosen by many candidates. Which of the following is/are INCORRECT?



Papercode can either act as a primary key and a foreign key in R2.



Papercode acts as a foreign key in R2.



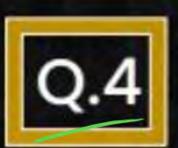


Papercode satisfies <u>UNIQUE</u> and NOT NULL constraint R₂.



Papercode allows NULL values in R2.

L values in R_2 . $\mathcal{M}(A)(c) \mathcal{L}(b)$



Consider the following SQL Query:





Create table department

partment additionally Deleted (3.0) (5.0) (7.3)

Department

a integer;

b integer;

Ang (3)

primary key (a);

foreign key (b) reference department ON

DELETE CASCADE

(3,0) (5,0)

};

Primary => 3 es also Deleted

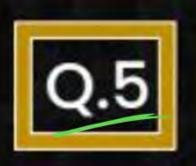
The Tuples (a, b) currently in the table department are: 3

(0, 2) (1, 2) (2, 1) (3, 0) (5, 0) (7, 3) (4, 2) (6, 1) (7,3) oldo P.k > Delete

Consider the following query

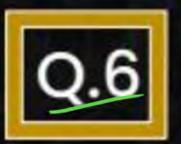
Delete from department where a = 0

The number of Tuples that must be additionally deleted to preserve referential integrity is _____.



Consider the following relation Supervision (EmployeeID, Name, SupervisorID) pertaining to a company's database:
The key SupervisorID acts as a Foreign key in the relation
Supervision. The schema follows "On Delete Cascade" constraint.
The employee having EmployeeID '5' is deleted from the relation
Supervision. The number of tuples remaining in the relation are

	EmployeeID	Name	SupervisorID	JEIC Tobles
(5,0,2) = P.k 5 Deleted	2 1	A	X	Total 5 Thes Delet ce
	2	A	6 -	•
(4 c 5) => P.K 'y' Doleted	3	В	2 -	Remaining = (3)
(1A4) (7 B4) = P.k (1 & 7 Deleter)	①·····4······	С	<u>5</u> X	
	(5)	D	2 ×	
(8.0,1)	6	E	3 -	(E & C)
	3	В	4 ×	
	(4) — 8 — —	A	1X	



Consider the following relational schemas:

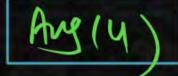


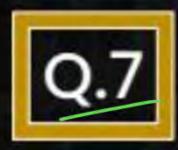
All the items supplied by M/s Balaji Furniture are banned. Moreover, the company no longer sells steel items. The schema follows "On Delete Cascade" constraint. Delete all the records from Catalogue where sno = S2 OR pno = P3 OR pno = P4. The number of tuples deleted from the Catalogue relation is

(Catalogue)		
<u>sno</u>	pno	cost
S1	P1	150
S1	P2	50
S1	(P3)	100
(S2)	(P4)	200
<u>S2</u>)	P5	250
S3	P1	250
S3	P2	150
S3	P5	300
-83-	P4	250

Suppliers		
<u>sno</u>	sname	location
S1	M/s Royal furniture	Delhi
<u>(S2)</u>	M/s Balaji furniture	Bangalore
S3	M/s Premium furniture	Chennai

Parts			
pno	pname	part_spec	
P1	Table	Wood	
P2	Chair	Wood	
<u>P3</u>	Table	Steel	
<u>P4</u>	Almirah	Steel	
P5	Almirah	Wood	





Consider the following statements:



P: Insertion of tuples into referenced relation may cause foreign key violation.

Q: Insertion of tuples into referencing relation may cause foreign key violation.

Which of the following is/are CORRECT?

Contain brieign leg

A.

P only

Ang (b)

Referenced Relation

Referencing Relation



Q only

Insert



Both P and Q

X Delete)
Violation



Neither P nor Q





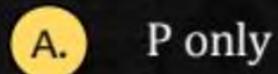
Consider the following statements:



P: Updation of tuples into referenced relation may cause foreign key violation.

Q: Updation of tuples into referencing relation may cause foreign key violation.

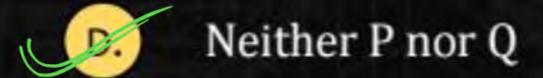
Which of the following is/are INCORRECT?



Ang (D).

B. Q only

C. Both P and Q





UPDATE =) May Gure Vialation is that Pk Used in the Referencing Relation then Violation incus (8) Referencing Relation

Update then Vielation Occur Bez is Updated Value Not Propert in the Pik of Referenced Relation



