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CS350 HW5

Write some queries (DUE Week 6 - Friday night at midnight)

6.23

A.

Result1 <- (Select)Salesperson = "Jane Doe"(name) Result2 <- Result1 |><| Sale

Result <- Project Operation (Result2 Car)

B.

Result1 <- Project Operation(Serial_no) Car Result2 <- Project Operation(Serial_no)

Option Result3 <- Result1 - Result2 Result4 <- Project Operation (Result3 |><|Car)

C.

A left outer join between salesperson and sale, will display all of salesperson and all sales that match, otherwise the sale area will be marked as null

Ex: Consider the following sales person records

a. ID_1,CAB,9999999

b. ID_2,JOE,1111111

And having tuple:

a.

ID_1,122,5-09-2008,500000

Result of join operation:

a.

ID_1,CAB,9999999,122,5-09-2008,500000

b. ID_2,JOE,1111111,NULL,NULL,NULL

D.

Result1 <- (Select)Salesperson = "Jane Doe"(Name) Result2 <- (Select)Salesperson = "Jenny Doe"(Name) Result3 <- Result1 U Result2

This query gives information about Doe couple, who happen to work at the same place.

6.26

C.

Without a COUNT function, this query cannot be completed.

D.

Tuple relational Calculus:

{s.Name, c.CourseName, c.CourseNumber, c.CreditHours, t.Semester, t.Year, g.Grade | STUDENT(s) AND COURSE(c) AND SECTION(t) AND GRADE_REPORT(g) AND

s.Class=5 AND s.Major='COSC' AND s.StudentNumber=g.StudentNumber AND g.SectionIdentifier=t.SectionIdentifier AND t.CourseNumber=c.CourseNumber}

Domain relational Calculus:

{aefgklp | (EXISTS b) (EXISTS c) (EXISTS d) (EXISTS n) (EXISTS o) (EXISTS j) (EXISTS i) (STUDENT(abcd) AND COURSE(efgh) AND SECTION(ijklm) AND GRADE_REPORT(nop) AND c=5 AND d='COSC' AND b=n AND i=o AND j=f)}

E.

Tuple relational Calculus:

{ s.Name, s.Major | STUDENT(s) AND (FORALL g) (NOT(GRADE_REPORT(g)) OR NOT(s.StudentNumber=g.StudentNumber) OR g.Grade='A') } Domain relational Calculus: { ad | (EXISTS b) (STUDENT(abcd) AND (FORALL e) (FORALL g) (NOT(GRADE_REPORT(efg)) OR NOT(b=e) OR g='A')) }