HW2

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(a) rewrite the fastest query in Example 8.17 by using the aggregate min

fastest(Part, min<Time>) <- part\_cost(Part,Sup,Cost,Time)

(b) rewrite the howsoon query in Exampe 8.19 using the max aggregate.

Howsoon(Asspart, max<Time>) <- timeForbasic(Asspart, Time)

(c) rewrite the recursive query from pages 256, 257 an 258 of the DB2 book in Datalog.

(below is a datalog program and completed tasks in c)

database( { components(Part:string,Subpart:string,Qty:integer)} ).

256:

wingparts(P,Subpart, Qty) <- components(P, Subpart , Qty), P = "Wing".

wingparts(P,Subpart2, Qty) <- wingparts(P, Subpart1, Qty1), components(Subpart1, Subpart2, Qty2), Qty = Qty1\*Qty2.

257:

findsum(sum<Qty>) <- wingparts(P,S , Qty), S = "Rivet".

wingparts(P,Subpart, Qty) <- components(P, Subpart , Qty), P = "Wing".

wingparts(P,Subpart2, Qty) <- wingparts(P, Subpart1, Qty1), components(Part, Subpart2, Qty2), Subpart1=Part, Qty = Qty1\*Qty2.

258:

getsum(P, Subpart1, sum<Qty>) <- wingparts(P,Subpart1,Qty),wingparts(P,Subpart2,Qty),Subpart1=Subpart2.

wingparts(P,Subpart, Qty) <- components(P, Subpart , Qty), P = "Wing".

wingparts(P,Subpart2, Qty) <- wingparts(P, Subpart1, Qty1), components(Subpart1, Subpart2, Qty2), Qty = Qty1\*Qty2.

export wingparts(P,Subpart,Qty).

export findsum(X).

export getsum(P, Kind, Qty).