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CS353 Database Systems Section-2

Homework 3 Answers 21901575

Q1)

1. SELECT S.sname

FROM Store AS S, Cloth AS C, Sells AS B

WHERE S.sid = B.sid AND B.cid = C.cid

AND S.country = “Turkey” AND C.size = “XL”

1. SELECT max(B.price)

FROM Cloth AS C, Sells AS B

WHERE C.cid = B.cid AND C.gender = “female”

AND B.sdate = “08/10/2017”

1. (SELECT S.sname, S.zipcode

FROM Store AS S, Cloth AS C, Sells AS B

WHERE S.sid = B.sid AND B.cid = C.cid

AND S.country = “France” AND B.price < 100

AND C.type = ”jeans” AND C.gender = “female”)

INTERSECT

(SELECT S.sname, S.zipcode

FROM Store AS S, Cloth AS C, Sells AS B

WHERE S.sid = B.sid AND B.cid = C.cid

AND S.country = “France” AND B.price < 100

AND C.type = ”jeans” AND C.gender = “male”)

1. SELECT C.cid, count(\*) AS quantity\_sold

FROM Store AS S, Cloth AS C, Sells AS B

WHERE S.sid = B.sid AND B.cid = C.cid

AND S.country = “Germany” AND C.type = ‘suit’

GROUP BY C.cid

Q2)

1. SELECT B.brand-name, M.owner-company-name

FROM Brand AS B, Model AS M, Engine AS E

WHERE B.country = “Germany” AND B.brand-name = M. brand-name

AND M.price < 8000 AND M.engine-id = E.engine-id

AND E.horse-power >170

1. SELECT B.brand-name, M.owner-company-name

FROM Brand AS B, Model AS M, Engine AS E

WHERE B.brand-name = M. brand-name AND M.engine-id = E.engine-id

AND brand-name NOT IN (SELECT brand-name

FROM Brand AS B, Model AS M, Engine AS E

WHERE B.brand-name = M. brand-name

AND M.engine-id = E.engine-id

AND E.fuel-type = “diesel”)

1. SELECT B.brand-name

FROM Brand AS B

WHERE B.country = "Germany"

AND exists (SELECT \*

FROM Model AS M1, Engine AS E1

WHERE B.brand-name = M1.brand-name

AND M1.engine-id = E1.engine-id

AND B.country = "Germany" AND E1.horse-power > 300)

AND exists (SELECT \*

FROM Model AS M2, Engine AS E2

WHERE B.brand-name = M2.brand-name

AND M2.engine-id = E2.engine-id

AND B.country = "Germany" AND E2.fuel-type = “diesel”)

1. SELECT B.brand-name, M.model-name

FROM Brand AS B, Model AS M

WHERE B.brand-name = M.brand-name

GROUP BY M.model-name

HAVING count(DISTINCT M.engine-id) > 4

1. SELECT B.brand-name, M.model-name

FROM Brand AS B, Model AS M, Tax as T

WHERE B.brand-name = M.brand-name AND M.tax-level = T.tax-level

AND T.tax-cost BETWEEN 150 AND 300

GROUP BY model-name

HAVING count(DISTINCT engine-id) > 4

1. SELECT avg(M.price)

FROM Brand AS B, Model AS M, Engine AS E

WHERE B.brand-name = M. brand-name AND M.engine-id = E.engine-id

AND B.country = “France” AND E.horse-power = 300,

1. SELECT B.brand-name

FROM Brand AS B, Model AS M

WHERE B.brand-name = M.brand-name

AND (SELECT avg(M.price)

WHERE B.country = “Germany” AND M.sold-amount > 1000) >

all (SELECT avg(N.price)

FROM Model as N, Brand AS C

WHERE C.country = “France”)

1. SELECT B.brand-name, B.owner-company-name

FROM Brand AS B, Model AS M1, Engine AS E

WHERE B.brand-name = M1. brand-name AND M1.engine-id = E.engine-id

AND B.country = “France”

AND E.fuel-type = “gasoline”

AND exists (SELECT B.brand-name

FROM Model AS M2,

WHERE B.country = “France”

AND M2.sold-amount < M1.sold-amount)