MySQL

**#1#**

SELECT if(model regexp '^([A-z]\*|[0-9]\*)$', model, null) FROM product;

**#2#**

SELECT

subQ.number, P.maker, P.model

FROM

Product AS P

LEFT JOIN

(SELECT

@i:=@i + 1 AS number, subP.maker

FROM

(SELECT

COUNT(subP.model) AS count, subP.maker

FROM

Product AS subP

GROUP BY subP.maker

ORDER BY count DESC , maker) AS subP, (SELECT @i:=0) AS t) AS subQ ON subQ.maker = P.maker

**#3#**

SELECT

subQ.number, P.maker, P.model

FROM

Product AS P

LEFT JOIN

(SELECT

@i:=@i + 1 AS number, subP.maker

FROM

(SELECT

COUNT(subP.model) AS count, subP.maker

FROM

Product AS subP

GROUP BY subP.maker

ORDER BY count DESC , maker) AS subP, (SELECT @i:=0) AS t) AS subQ ON subQ.maker = P.maker

**#4#**

SELECT

IF(num % 6 = 0, PC.code, ''), AVG(PC.price)

FROM

PC

JOIN

(SELECT

@i:=@i + 1 AS num,

d.code AS code,

IF(@i % 6 = 0, @g:=@g + 1, @g) AS 'group'

FROM

PC AS d, (SELECT @i:=- 1, @g:=0) AS t

ORDER BY d.code) AS sub ON sub.code = PC.code

GROUP BY sub.group;

**#5#**

SELECT

subQ.maker,

SUM(subQ.CNT) AS 'Models qty',

SUM(IF(subQ.CNT = 1, 0, subQ.CNT)) AS 'Common prices qty'

FROM

(SELECT

maker,

CASE Product.type

WHEN 'Printer' THEN printer.price

WHEN 'Laptop' THEN laptop.price

WHEN 'PC' THEN pc.price

END AS priceD,

COUNT(maker) AS CNT

FROM

Product

LEFT JOIN Laptop

ON Product.model = Laptop.model

LEFT JOIN PC

ON PC.model = Product.model

LEFT JOIN Printer

ON Printer.model = Product.model

GROUP BY priceD) AS subQ

GROUP BY subQ.maker

**#6.1#**

SELECT

ROUND(AVG(m), 3)

FROM

Laptop

JOIN

(SELECT

MIN(price) AS m

FROM

Laptop

GROUP BY model) AS y ON y.m = Laptop.price

WHERE

model IN (SELECT

model

FROM

Product

WHERE

type = 'Laptop'

AND maker IN (SELECT

t.maker

FROM

PC

LEFT JOIN

(SELECT

MIN(cd) AS min

FROM

PC) AS min ON min.min = PC.cd

LEFT JOIN

Product AS t ON PC.model = t.model

WHERE

min.min IS NOT NULL))

AND m IS NOT NULL

**#6.2#**

SELECT

ROUND(AVG(price), 3)

FROM

PC

JOIN

(SELECT

MAX(price) AS h

FROM

PC

GROUP BY model) AS ss ON price = ss.h

WHERE

model IN (SELECT

model

FROM

Product

WHERE

maker IN (SELECT

maker

FROM

Product

WHERE

model IN (SELECT DISTINCT

model

FROM

Printer

JOIN

(SELECT

MIN(price) AS min

FROM

Printer) AS sub ON price = sub.min))

AND type = 'PC')

**#6.3#**

SELECT

ROUND(AVG(price), 3)

FROM

Printer

JOIN

(SELECT

MAX(price) AS m

FROM

Printer

GROUP BY model) AS r ON r.m = Printer.price

WHERE

model IN (SELECT

model

FROM

Product

WHERE

maker IN (SELECT

maker

FROM

Product

WHERE

model IN (SELECT

model

FROM

Laptop

JOIN

(SELECT

MAX(ram) AS m

FROM

Laptop) AS m ON m.m = Laptop.ram))

AND type = 'Printer')