CREATE DATABASE group_sort

Q-- find top 5 samsung phones with biggest screen size

```
SELECT model, screen_size FROM
group_sort.smartphones WHERE brand_name =
'samsung'
ORDER BY screen_size DESC  LIMIT 5
```

Q-- sort the phone in descending order of number of total camera

```
SELECT model,num_front_cameras +
num_rear_cameras AS 'total_cameras'
FROM group_sort.smartphones
ORDER BY total_cameras DESC
```

Q-- sort data on the basis of ppi in decreasing order

```
SELECT model,
ROUND(SQRT(resolution_width*resolution_width +
resolution_height*resolution_height)/screen_size) AS
'ppi'
FROM group_sort.smartphones
ORDER BY ppi DESC
```

Q-- find the phone with second largest battery

-- LIMIT x(from wich col), y(range)

SELECT model, battery_capacity FROM group_sort.smartphones

ORDER BY battery_capacity DESC LIMIT 1, 1

Q-- find the name and rating of the worst rated apple phone

SELECT model, rating

FROM group_sort.smartphones

WHERE brand_name = 'apple'

ORDER BY rating ASC LIMIT 1

Q-- sorting by two column

SELECT brand_name, price FROM group_sort.smartphones

ORDER BY brand_name ASC, PRICE ASC

GROUPING DATA

Q-- group smartphones by brand and get the count, average price, max ratin , avg, screen size and avg battery capacity

SELECT brand_name, COUNT(*) AS 'num_phones', ROUND(AVG(price)) AS 'avg price',

MAX(rating) AS 'max rating', AVG(screen_size) AS 'avg_screen_size',

AVG(battery_capacity) AS 'avg_battery_capacity'

FROM group_sort.smartphones

GROUP BY brand_name

ORDER BY num_phones DESC LIMIT 15

Q-- group smartphnes and get the average price and rating

-- SELECT brand_name, AVG(price) as 'avg_price', AVG(rating) as 'avg_rate'

-- FROM group_sort.smartphones

-- WHERE has_nfc = 'True'

-- GROUP BY brand_name

Q-- group smartphnes by whether they have an NFC and get the average price and rating

SELECT has_nfc , AVG(price) as 'avg_price', AVG(rating) AS 'avg_rating'

FROM group_sort.smartphones

GROUP BY has_nfc

Q-- group smartphones by the extended memory available and get the average pric

Q-- and the average primary camera resolution(rear)

SELECT brand_name,os,

processor_brand,

COUNT(*) as 'num phones',

ROUND(AVG(primary_camera_rear)) As 'avg_camera_resoluton'

FROM group_sort.smartphones

GROUP BY brand_name, processor_brand,os

Q-- find top 5 most costly phone brand

```sql
SELECT brand_name, ROUND(AVG(price)) AS 'avg_price'
FROM group_sort.smartphones
GROUP BY brand_name
ORDER BY avg_price DESC LIMIT 5
```

Q-- which brand makes the smallest screen smartphones

```sql
SELECT brand_name, AVG(screen_size) AS 'avg_screen_size'
FROM group_sort.smartphones
GROUP BY brand_name
ORDER BY avg_screen_size ASC
```

Q-- make avg price of 5g vs avg price of non 5g

Q-- group smartphones by the brand, and find the brand with the highest number of models that have both NFC and an IR blaster

SELECT brand_name, COUNT(has_nfc) AS 'NFC', COUNT(has_ir_blaster) AS 'IR_blaster'

FROM group_sort.smartphones

WHERE has_nfc = 'True' AND has_ir_blaster = 'TRUE'

GROUP BY brand_name

ORDER BY NFC, IR_blaster ASC

HAVING   -

-- SELECT -> WHERE

-- GROUP BY -> HAVING

SELECT brand_name, COUNT(*) AS 'count',

AVG(price) AS 'avg_price'

FROM group_sort.smartphones

GROUP BY brand_name

HAVING count > 20

ORDER BY avg_price DESC

Q-- find the top 3 brands with the highest avg ram that have a refresh rate of at least 90 HZ and fast charging available and dont consider brands which have less than 10 phones

SELECT brand_name, AVG(ram_capacity) AS 'avg_ram_capacity', COUNT(*) AS 'count'

FROM group_sort.smartphones

where refresh_rate> '90'AND fast_charging_available = 1

GROUP BY brand_name

HAVING count > 10

ORDER BY avg_ram_capacity DESC LIMIT 3

Q-- find the avg price of all the phone brands with avg rating > 70 and num_phones more than 10 among all 5g enabled phones

SELECT brand_name, AVG(price) AS 'avg_price'

FROM group_sort.smartphones

WHERE has_5g = 'True'

GROUP BY brand_name

HAVING AVG(rating) > 70 AND COUNT(*) > 10

ORDER BY avg_price DESC

Q-- find top 5 batsman in IPL

SELECT batter, SUM(batsman_run) AS 'total_run'

FROM group_sort.ipl

GROUP BY batter

ORDER BY total_run DESC

Q-- find the second highest 6 hitter in IPL

SELECT batter, COUNT(batsman_run) AS 'no_of_6'

FROM group_sort.ipl

WHERE batsman_run = 6

GROUP BY batter

ORDER BY no_of_6 DESC LIMIT 1, 1

-- Q. find virat kohlis performance against all ipl teams

-- Q. find top 10 batsman with centuries in IPL

-- Q. find top 10 batsman with centuries in IPL

-- Q. find the top 5 batsman with highest strike rate who have played a min of 1000 balls