

...Flipkart_Database_System...

- Create and Select Database

```
create database flipkart;
```

```
use flipkart;
```

- Select All Mobiles

```
select * from mobiles;
```

Output:-

Name	Brand	Ratings	No_of_ratings	No_of_reviews	Product_features	MSP	MRP	Discount
realme 9i (Prism Blue, 64 GB)	realme	4.5	1,11,865	6611	[4 GB RAM 64 GB ROM Expandable Upto 1 T...	10999	15999	31
realme 9i (Prism Black, 64 GB)	realme	4.5	1,11,865	6611	[4 GB RAM 64 GB ROM Expandable Upto 1 T...	10999	15999	31
realme 9i (Prism Blue, 128 GB)	realme	4.5	25380	1517	[6 GB RAM 128 GB ROM Expandable Upto 1 ...	13499	17999	25
realme 9i (Prism Black, 128 GB)	realme	4.5	1,11,865	6611	[4 GB RAM 128 GB ROM Expandable Upto 1 ...	10999	16999	35
realme 9i (Prism Blue, 128 GB)	realme	4.5	1,11,865	6611	[4 GB RAM 128 GB ROM Expandable Upto 1 ...	10999	16999	35
POCO C31 (Shadow Gray, 64 GB)	POCO	4.3	1,78,186	11037	[4 GB RAM 64 GB ROM Expandable Upto 512...	7499	11999	37
REDMI 9i Sport (Metallic Blue, 64 GB)	REDMI	4.3	2,01,192	11760	[4 GB RAM 64 GB ROM Expandable Upto 512...	7099	9999	29

- Price Range Distribution by Brand

```
select
```

```
brand,
```

```
sum(case when mrp between 0 and 9999 then 1 else 0 end) as 'price between 10k',
```

```
sum(case when mrp between 10000 and 19999 then 1 else 0 end) as 'price between 10k-20k',
```

```
sum(case when mrp between 20000 and 29999 then 1 else 0 end) as 'price between 20k-40k',
```

```
sum(case when mrp >= 40000 then 1 else 0 end) as 'price above 40k'
```

```
from mobiles
```

```
group by brand
```

```
order by brand;
```

Output:-

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	brand	price between 10k	price between 10k-20k	price between 20k-40k	price above 40k
▶	AVGAGE	1	0	0	0
	APPLE	0	0	0	45
	BlackZone	3	0	0	0
	DIZO	1	0	0	0
	Google	0	0	0	1
	GREENBERRI	1	0	0	0

- **Brand with Maximum Discount**

```

select
brand,
max(mrp-msp) as maxdiscount
from
mobiles
group by
brand
order by
maxdiscount desc
limit 1;

```

Output:-

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

Fetch rows:

brand	maxdiscount
SAMSUNG	35000

- **Brand with Minimum Discount**

```

select
brand,
max(mrp-msp) as maxdiscount
from mobiles
group by
brand
order by

```

maxdiscount asc

limit 1;

Output:-

Result Grid		Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
brand	maxdiscount				
KARBONN	19				

- **Top 5 Brands by Average Rating**

select

brand, avg(ratings) as avg_rating

from

mobiles

group by

brand

order by avg_rating desc

limit 5;

Output:-

Result Grid		Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
brand	avg_rating				
APPLE	4.595555555555554				
realme	4.3938596491228035				
vivo	4.343589743589743				
OPPO	4.32962962962963				
Google	4.3				

- **Top 5 Brands by Number of Reviews**

select

brand,

sum(no_of_reviews) as total_reviews

from

mobiles

group by

brand

order by

total_reviews desc

limit 5;

Output:-

brand	total_reviews
realme	467003
POCO	353293
REDMI	328078
APPLE	321062
SAMSUNG	194347

- Mobiles with Rating Greater Than 4.5

select*

from mobiles

where ratings > 4.5;

Output:-

Name	Brand	Ratings	No_of_ratings	No_of_reviews	Product_features	MSP	MRP	Discount
APPLE iPhone 13 (Midnight, 128 GB)	APPLE	4.7	1,74,464	9613	[128 GB ROM, '15.49 cm (6.1 inch) Super Retin...	61999	69900	11
APPLE iPhone 13 (Green, 128 GB)	APPLE	4.7	1,74,464	9613	[128 GB ROM, '15.49 cm (6.1 inch) Super Retin...	61999	69900	11
APPLE iPhone 11 (Black, 64 GB)	APPLE	4.6	1,75,307	10437	[64 GB ROM, '15.49 cm (6.1 inch) Liquid Retina...	38999	43900	11
APPLE iPhone 11 (White, 64 GB)	APPLE	4.6	1,75,307	10437	[64 GB ROM, '15.49 cm (6.1 inch) Liquid Retina...	38999	43900	11
APPLE iPhone 11 (Black, 128 GB)	APPLE	4.6	1,75,307	10437	[128 GB ROM, '15.49 cm (6.1 inch) Liquid Retin...	45999	48900	5
APPLE iPhone 13 ((PRODUCT)RED, 128 GB)	APPLE	4.7	1,74,464	9613	[128 GB ROM, '15.49 cm (6.1 inch) Super Retin...	61999	69900	11
APPLE iPhone 11 (Red, 64 GB)	APPLE	4.6	1,75,307	10437	[64 GB ROM, '15.49 cm (6.1 inch) Liquid Retina...	37999	43900	13

- Mobiles with Discount Greater Than 40%

select*

from mobiles

where discount > 40;

Output:-

Name	Brand	Ratings	No_of_ratings	No_of_reviews	Product_features	MSP	MRP	Discount
MOTOROLA G32 (Mineral Gray, 64 GB)	MOTOROLA	4.2	13588	1395	[4 GB RAM 64 GB ROM, '16.64 cm (6.55 inch) ...	9999	16999	41
MOTOROLA G32 (Satin Silver, 64 GB)	MOTOROLA	4.2	13588	1395	[4 GB RAM 64 GB ROM, '16.64 cm (6.55 inch) ...	9999	16999	41
OPPO F19 Pro+ 5G (Space Silver, 128 GB)	OPPO	4.3	22687	2364	[8 GB RAM 128 GB ROM Expandable Upto 25...	17490	29990	41
OPPO F19 Pro+ 5G (Fluid Black, 128 GB)	OPPO	4.3	22687	2364	[8 GB RAM 128 GB ROM Expandable Upto 25...	17490	29990	41
SAMSUNG Galaxy F42 5G (Matte Aqua, 128 GB)	SAMSUNG	4.1	5592	555	[8 GB RAM 128 GB ROM Expandable Upto 1 ...	14999	25999	42
Infinix Hot 11 2022 (Aurora Green, 64 GB)	Infinix	4.2	15621	1315	[4 GB RAM 64 GB ROM Expandable Upto 1 T...	7499	12999	42
SAMSUNG Galaxy S21 FE 5G (Graphite, 128 GB)	SAMSUNG	4.4	28344	2941	[8 GB RAM 128 GB ROM, '16.26 cm (6.4 inch) ...	39999	74999	46

- **Average Rating and Total Reviews by Brand**

```
select brand, avg(ratings) as avg_rating, sum(no_of_reviews) as total_reviews
from mobiles
group by brand
order by avg_rating desc;
```

Output:-



	brand	avg_rating	total_reviews
▶	APPLE	4.595555555555554	321062
	realme	4.3938596491228035	467003
	vivo	4.343589743589743	81153
	OPPO	4.32962962962963	51325
	Google	4.3	2768
	Nothing	4.3	16745
	POCO	4.256862745098043	353293

- **.Brands with High Ratings and Reviews**

```
select brand
from mobiles
group by brand
having avg(ratings) > 4.5 and
sum(no_of_reviews) > 30000;
```

Output:-








	brand
▶	APPLE

- **Top 5 Mobiles by Discount**

```
select*
from mobiles
order by discount desc
limit 5;
```

Output:-

Result Grid   Filter Rows: <input type="text"/>									
Export:  Wrap Cell Content:  Fetch rows: 									
Name	Brand	Ratings	No_of_ratings	No_of_reviews	Product_features	MSP	MRP	Discount	
SAMSUNG Galaxy S21 FE 5G (Olive, 128 GB)	SAMSUNG	4.4	28344	2941	[8 GB RAM 128 GB ROM, '16.26 cm (6.4 inch) ...	39999	74999	46	
SAMSUNG Galaxy S21 FE 5G (Lavender, 128 GB)	SAMSUNG	4.4	28344	2941	[8 GB RAM 128 GB ROM, '16.26 cm (6.4 inch) ...	39999	74999	46	
SAMSUNG Galaxy S21 FE 5G (Graphite, 128 GB)	SAMSUNG	4.4	28344	2941	[8 GB RAM 128 GB ROM, '16.26 cm (6.4 inch) ...	39999	74999	46	
Infinix Hot 11 2022 (Aurora Green, 64 GB)	Infinix	4.2	15621	1315	[4 GB RAM 64 GB ROM Expandable Upto 1 T...	7499	12999	42	
SAMSUNG Galaxy F42 5G (Matte Aqua, 128 GB)	SAMSUNG	4.1	5592	555	[8 GB RAM 128 GB ROM Expandable Upto 1 ...	14999	25999	42	

- **Top 2 Mobiles by Discount**






select*

from mobiles

order by discount desc

limit 2;

Output:-

Result Grid   Filter Rows: <input type="text"/>									
Export:  Wrap Cell Content:  Fetch rows: 									
Name	Brand	Ratings	No_of_ratings	No_of_reviews	Product_features	MSP	MRP	Discount	
SAMSUNG Galaxy S21 FE 5G (Olive, 128 GB)	SAMSUNG	4.4	28344	2941	[8 GB RAM 128 GB ROM, '16.26 cm (6.4 inch) ...	39999	74999	46	
SAMSUNG Galaxy S21 FE 5G (Lavender, 128 GB)	SAMSUNG	4.4	28344	2941	[8 GB RAM 128 GB ROM, '16.26 cm (6.4 inch) ...	39999	74999	46	

- **Top 2 Mobiles by Brand (Descending Order)**






select *

from mobiles

order by brand desc

limit 2;

Output:-

Result Grid   Filter Rows: <input type="text"/>									
Export:  Wrap Cell Content:  Fetch rows: 									
Name	Brand	Ratings	No_of_ratings	No_of_reviews	Product_features	MSP	MRP	Discount	
Xiaomi 11i 5G (Stealth Black, 128 GB)	Xiaomi	4.2	37175	4598	[6 GB RAM 128 GB ROM Expandable Upto 1 ...	24999	29999	16	
Xiaomi 11i Hypercharge 5G (Pacific Pearl, 128 GB)	Xiaomi	4.2	6364	715	[8 GB RAM 128 GB ROM Expandable Upto 1 ...	27999	33999	17	

- **Top 3 Brands by Discount**

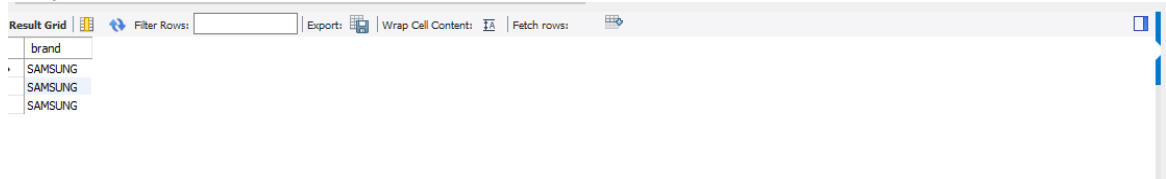
select brand

from mobiles

order by discount desc

limit 3;

Output:-



brand
SAMSUNG
SAMSUNG
SAMSUNG
SAMSUNG

- **Change Column Name (Mobile Table)**

```
alter table mobile
```

```
change name mobile_name varchar(250);
```

- **list All Brands Alphabetically**

```
select brand
```

```
from mobiles
```

```
order by brand;
```

Output:-



brand
ANGAGE
APPLE
APPLE
APPLE
APPLE
APPLE
APPLE
APPLE

- **Brand with the Most Mobiles**

```
select brand,
```

```
count(name) as totalmobiles
```

```
from mobiles group by brand order by totalmobiles desc
```

```
limit 1;
```

Output:-

Result Grid			Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	brand	totalmobiles				
▶	realme	114				