

# FLIPKART MOBILE SALES

## SQL PROJECT

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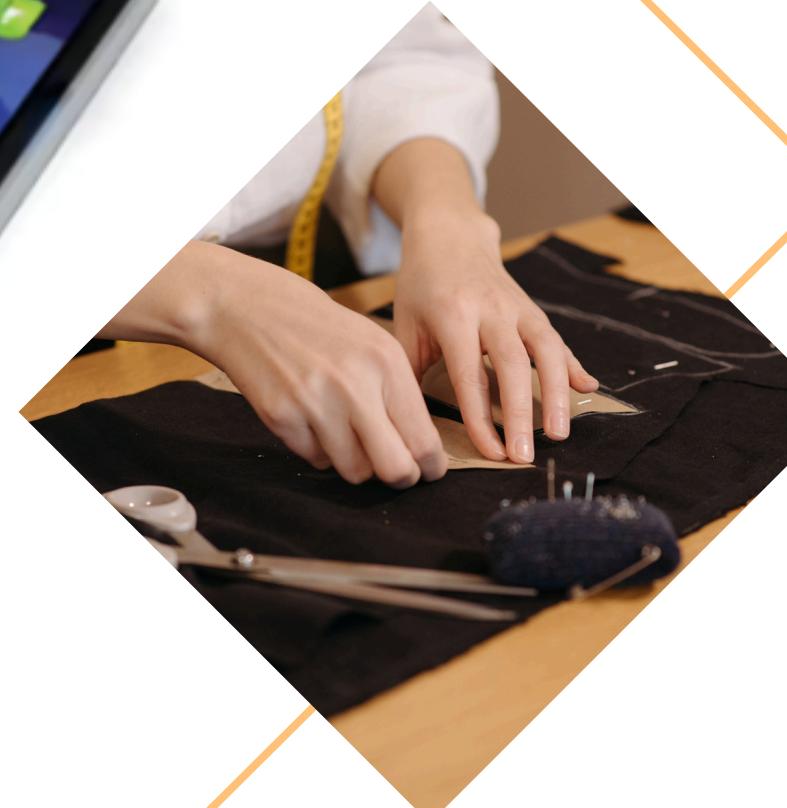
DATABASE-FLIPKART MOBILE SALES DATA

[HTTPS://WWW.KAGGLE.COM/DATASETS/DEVSUBHASH/FLIPKART-MOBILES-DATASET](https://www.kaggle.com/datasets/devsubhash/flipkart-mobiles-dataset)

# OBJECTIVE.

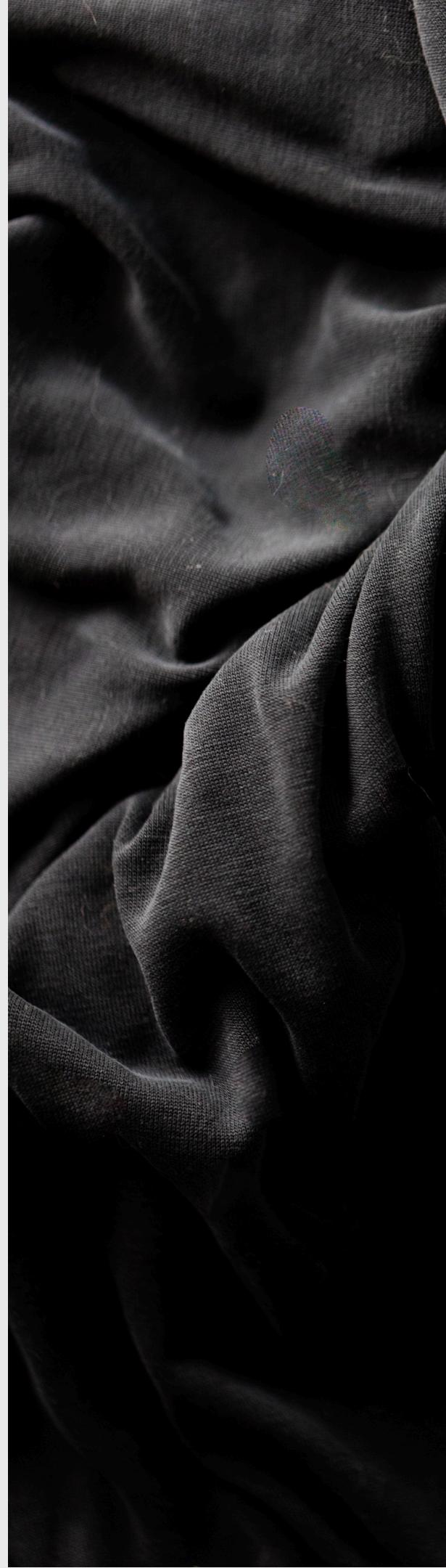
Through Queries, I have Explored Flipkart sales data to uncover insights into consuming patterns, most common ordered, highest priced, top rated mobile phones and many more.

Aiming to enhance decision making and marketing strategies to boost sales performance.



# PROBLEM STATEMENTS:

1. WHAT ARE THE TOP 10 HIGHEST-PRICED MOBILES?
2. FIND THE HIGHEST-PRICED PHONE FOR EACH BRAND?
3. WHAT IS THE AVERAGE PRICE BY STORAGE SIZE?
4. HOW MANY MOBILES ARE AVAILABLE PER BRAND?
5. WHAT ARE THE TOP 5 MOST-RATED MOBILES?
6. WHICH MOBILES HAVE HIGH RATINGS ( $\geq 4.5$ ) AND LOW PRICE ( $< ₹20,000$ )?
7. WHICH MOBILES OFFER THE HIGHEST DISCOUNT PERCENTAGE?
8. HOW MANY MOBILES FALL INTO DIFFERENT PRICE RANGES?
9. WHAT ARE THE BEST VALUE-FOR-MONEY MOBILES (HIGH RATING + HIGH DISCOUNT)?
10. IDENTIFY MOBILES THAT HAVE A PRICE HIGHER THAN THE BRAND'S AVERAGE PRICE?
11. FIND THE TOP-RATED MOBILE PHONE FOR EACH BRAND
12. WHICH COLORS ARE MOST COMMONLY AVAILABLE ACROSS ALL MOBILES?
13. WHAT IS THE PRICE DISTRIBUTION BY MEMORY AND STORAGE COMBINATION?



# 1.WHAT ARE THE TOP 10 HIGHEST-PRICED MOBILES?

```
▶ SELECT brand, model, Selling_Price  
FROM flipkart_mobile_sales.flipkart_machines  
ORDER BY Selling_Price DESC  
LIMIT 10;
```

← **QUERY**

**OUTPUT** →

Result Grid | Filter Rows:

	brand	model	Selling_Price
▶	Apple	iPhone 13 Pro Max	179900
	Apple	iPhone 13 Pro Max	179900
	Apple	iPhone 13 Pro Max	179900
	Apple	iPhone 13 Pro Max	179900
	Apple	iPhone 13 Pro Max	169900
	Apple	iPhone 13 Pro Max	159900
	Apple	iPhone 13 Pro Max	159900
	Apple	iPhone 13 Pro Max	159900
	Apple	iPhone 13 Pro Max	159900

## 2. FIND THE HIGHEST-PRICED PHONE FOR EACH BRANDS

```
WITH RankedPhones AS (
    SELECT
        Brand,
        Model,
        selling_Price,
        ROW_NUMBER() OVER (PARTITION BY Brand ORDER BY selling_Price DESC) as rn
    FROM
        flipkart_mobiles
)
SELECT
    Brand,
    Model,
    selling_Price
FROM
    RankedPhones
WHERE
    rn = 1;
```

```
SELECT
    Brand,
    Model,
    selling_Price
FROM
    RankedPhones
WHERE
    rn = 1;
```

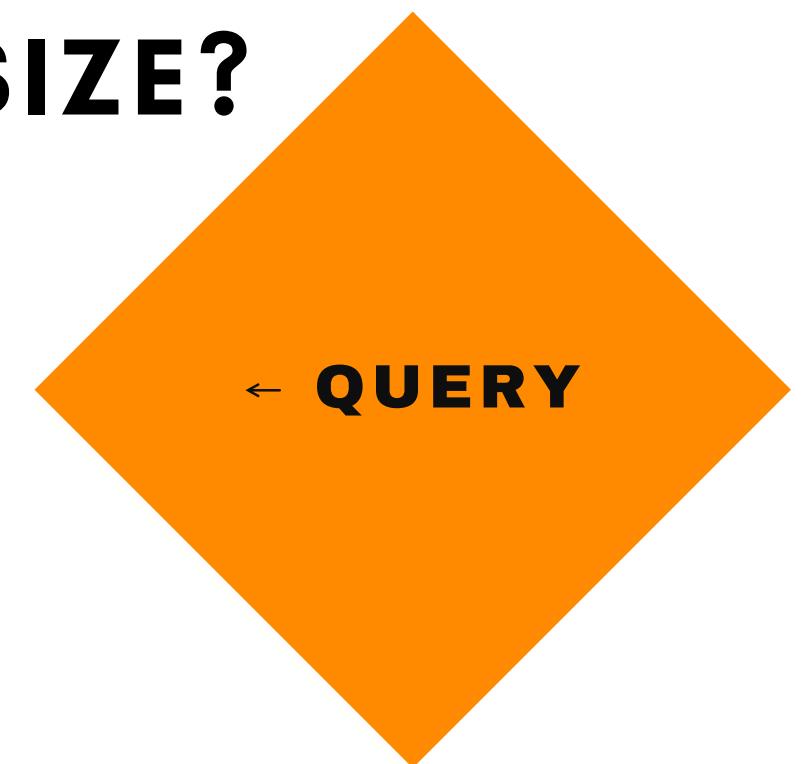
OUTPUT →

Brand	Model	selling_Price
Apple	iPhone 13 Pro Max	179900
ASUS	ROG Phone II	62999
GIONEE	A1	21499
Google Pixel	3 XL	92000
HTC	U Ultra	62990
Infinix	Zero 5 Pro	19999
IQOO	3	39990
Lenovo	Vibe Z2 Pro	29999
LG	V40 ThinQ	60000
Motorola	Razr 5G	89999
Nokia	9	56299
OPPO	Find X	60990
POCO	F3 GT	30999
realme	X50 Pro	47999
SAMSUNG	Galaxy Z Fold3 5G	157999
vivo	X70 Pro+	79990
Xiaomi	Mi 10	54999

← QUERY

### 3. WHAT IS THE AVERAGE PRICE BY STORAGE SIZE?

- ```
SELECT storage, AVG(Selling_Price) AS avg_price
FROM flipkart_mobiles
GROUP BY storage
ORDER BY avg_price DESC
limit 10;
```



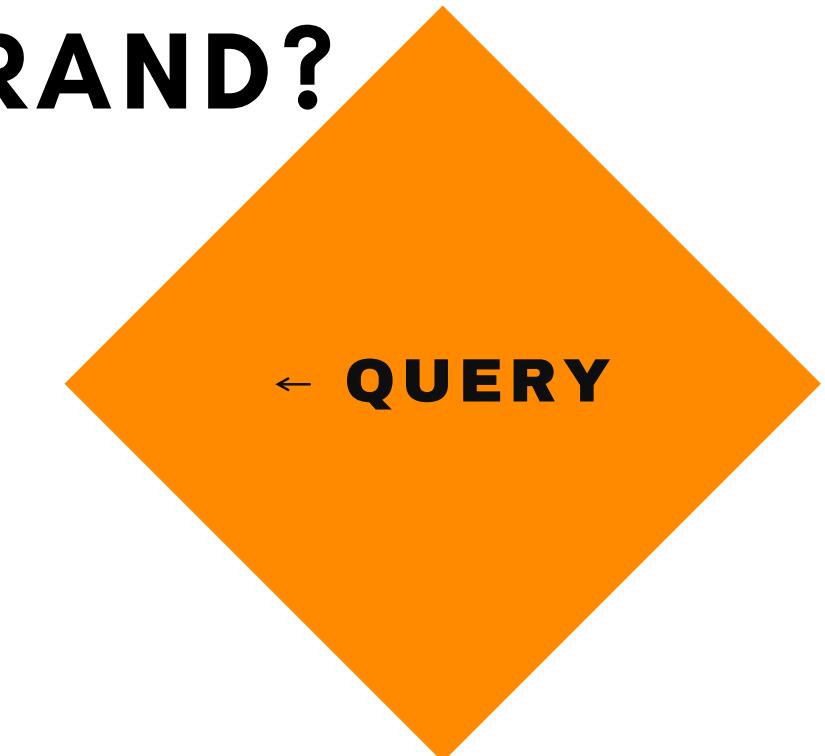
OUTPUT →

Result Grid | Filter Row

|   | storage | avg_price   |
|---|---------|-------------|
| ▶ | 1 TB    | 167915.0000 |
|   | 512 GB  | 127915.3778 |
|   | 256 GB  | 65644.5856  |
|   | 128 GB  | 30106.7141  |
|   | 130 GB  | 22549.5000  |
|   | 129 GB  | 22427.0000  |
|   | 64 GB   | 21395.5323  |
|   |         | 16913.7097  |
|   | 32 GB   | 14666.1505  |
|   | 16 GB   | 13041.2981  |

## 4. HOW MANY MOBILES ARE AVAILABLE PER BRAND?

- SELECT brand, COUNT(\*) AS total\_models  
FROM flipkart\_mobiles  
GROUP BY brand  
ORDER BY total\_models DESC;



OUTPUT →

| brand        | total_models |
|--------------|--------------|
| SAMSUNG      | 708          |
| Apple        | 334          |
| realme       | 309          |
| OPPO         | 251          |
| Xiaomi       | 192          |
| Nokia        | 188          |
| Infinix      | 151          |
| GIONEE       | 127          |
| Lenovo       | 120          |
| vivo         | 116          |
| ASUS         | 111          |
| Motorola     | 103          |
| LG           | 98           |
| POCO         | 73           |
| HTC          | 55           |
| Google Pi... | 29           |
| IQOO         | 5            |

## 5. WHAT ARE THE TOP 5 MOST-RATED MOBILES?

- ```
SELECT brand, Model, Rating
FROM flipkart_mobile_sales.flipkart_mobiles
ORDER BY Rating DESC
LIMIT 5;
```

← QUERY

OUTPUT →

Result Grid | Filter Rows:

brand	Model	Rating
Apple	iPhone 7 Plus	5
SAMSUNG	SM-B310EZDDINS	5
Apple	iPhone 7 Plus	5
vivo	S2	5
vivo	Z1x	5

## 6. WHICH MOBILES HAVE HIGH RATINGS ( $\geq 4.5$ ) AND LOW PRICE (<₹20,000)?

```
▶ SELECT brand, model, Selling_price, Rating  
      FROM flipkart_mobile_sales.flipkart_machines  
     WHERE rating >= 4.5  
           AND Selling_Price < 20000  
     ORDER BY rating DESC, Selling_Price;
```

← QUERY

OUTPUT →

brand	model	selling_price	rating
SAMSUNG	SM-B310EZDDINS	1949	5
vivo	Z1x	19990	5
vivo	S2	19990	5
realme	9 5G	17499	4.8
realme	9 5G	17499	4.8
Xiaomi	Redmi 7A	6499	4.5
Xiaomi	Redmi 7A	6999	4.5
Xiaomi	Redmi 9A	7589	4.5
Xiaomi	Redmi 9A	7619	4.5
Xiaomi	Redmi 9A	8498	4.5

# 7.WHICH MOBILES OFFER THE HIGHEST DISCOUNT PERCENTAGE?

```
SELECT brand, model, Selling_price, Original_price,  
round(((Original_price - Selling_price)*100.0/Original_Price),2) as Discount_Percentage  
FROM flipkart_mobile_sales.flipkart_mobiles  
ORDER BY Discount_Percentage DESC  
LIMIT 10;
```

← **QUERY**

**OUTPUT** →

	brand	model	Selling_price	Original_price	Discount_Percentage
▶	GIONEE	Pioneer P3	2350	7996	70.61
	GIONEE	Marathon M5 Plus	8499	28099	69.75
	ASUS	ROG	26499	8499	68.45
	Motorola	Z2 Force	14999	44999	66.67
	Nokia	8110	3000	8400	64.29
	LG	Wing	29999	80000	62.50
	LG	Wing	29999	80000	62.50
	GIONEE	S6	7999	20924	61.77
	LG	G8X	27990	70000	60.01
	Google Pixel	Nexus 5X	12000	29990	59.99

## 8. HOW MANY MOBILES FALL INTO DIFFERENT PRICE RANGES?

- **SELECT**

- **CASE**

```
WHEN selling_price < 10000 THEN 'Below 10K'  
WHEN selling_price BETWEEN 10000 AND 20000 THEN '10K-20K'  
WHEN selling_price BETWEEN 20001 AND 30000 THEN '20K-30K'  
ELSE 'Above 30K'  
END AS price_range,  
COUNT(*) AS total_mobiles  
FROM flipkart_mobile_sales.flipkart_machines  
GROUP BY price_range;
```

**OUTPUT →**

A large orange diamond labeled "OUTPUT →" is positioned on the left side of the slide. It has a thin orange line extending from its bottom edge towards the center, where it meets another orange line that points to the "Result Grid".

```
Result Grid | Filter Rows:  
| price_range | total_machines |  
| 10K-20K | 1097 |  
| Below 10K | 849 |  
| 20K-30K | 366 |  
| Above 30K | 658 |
```

← **QUERY**

A large orange diamond labeled "QUERY" is positioned on the right side of the slide. It has a thin orange line extending from its top edge towards the center, where it meets another orange line that points to the "Result Grid".

The screenshot shows a database result grid with the following data:

	price_range	total_machines
▶	10K-20K	1097
	Below 10K	849
	20K-30K	366
	Above 30K	658

## 9.WHAT ARE THE BEST VALUE-FOR-MONEY MOBILES (HIGH RATING + HIGH DISCOUNT)?

- ```
SELECT brand, model, selling_price, rating,
round(((Original_price - Selling_price)*100.0/Original_Price),2) as discount_percentage
FROM flipkart_mobile_sales.flipkart_mobiles
WHERE rating >= 4
ORDER BY discount_percentage DESC, rating DESC
LIMIT 10;
```

← QUERY

OUTPUT →

|   | brand        | model            | selling_price | rating | discount_percentage |
|---|--------------|------------------|---------------|--------|---------------------|
| ▶ | Motorola     | Z2 Force         | 14999         | 4.1    | 66.67               |
|   | LG           | Wing             | 29999         | 4.2    | 62.50               |
|   | LG           | Wing             | 29999         | 4.2    | 62.50               |
|   | LG           | Stylus 2         | 8350          | 4.1    | 56.05               |
|   | ASUS         | ROG              | 26499         | 4.3    | 68.45               |
|   | Google Pixel | Nexus 5X         | 12000         | 4.5    | 59.99               |
|   | GIONEE       | Marathon M5 Plus | 8499          | 4.1    | 69.75               |
|   | SAMSUNG      | Galaxy S7        | 22222         | 4.4    | 57.27               |
|   | LG           | G8X              | 27990         | 4.4    | 60.01               |
|   | LG           | G6               | 22990         | 4.2    | 58.20               |

# 10. IDENTIFY MOBILES THAT HAVE A PRICE HIGHER THAN THE BRAND'S AVERAGE PRICE?

- ```
SELECT m.brand, m.model, m.selling_price
FROM flipkart_mobiles m
JOIN (
    SELECT brand, AVG(Selling_Price) AS avg_price
    FROM flipkart_mobiles
    GROUP BY brand
) b
ON m.brand = b.brand
WHERE m.selling_price > b.avg_price
limit 10;
```

← QUERY

OUTPUT →

Result Grid | Filter Rows:

	brand	model	selling_price
▶	OPPO	Reno7 Pro 5G	39999
	OPPO	F9 Pro	21990
	OPPO	Reno2	38990
	OPPO	Reno 10x Zoom	41990
	OPPO	Reno 10x Zoom	41990
	OPPO	Reno 10x Zoom	38990
	OPPO	F1S	18990
	OPPO	F1S	18990
	OPPO	F1S	18990
	OPPO	F1 Plus	24900

# 11. FIND THE TOP-RATED MOBILE PHONE FOR EACH BRAND

```
• WITH rated AS (
    SELECT *,
        ROW_NUMBER() OVER (PARTITION BY brand ORDER BY rating DESC) AS rn
    FROM flipkart_mobiles
)
SELECT brand, model, rating
FROM rated
WHERE rn = 1;
```

← QUERY

OUTPUT →

	brand	model	rating
▶	Apple	iPhone 7 Plus	5
	ASUS	ROG Phone II	4.6
	GIONEE	Marathon	4.4
	Google Pixel	2	4.6
	HTC	U11+	4.7
	Infinix	Hot 8	4.5
	IQOO	3	4.4
	Lenovo	P2	4.3
	LG	Nexus4 E960	4.5
	Motorola	One Fusion+	4.4
	Nokia	C20 Plus	4.4
	OPPO	Find X	4.6
	POCO	F1	4.5
	realme	9 5G	4.8
	SAMSUNG	SM-B310EZD...	5
	vivo	X60 Pro	5
	Xiaomi	Redmi Note 7...	4.5

## 12.WHICH COLORS ARE MOST COMMONLY AVAILABLE ACROSS ALL MOBILES?

- ```
SELECT color, COUNT(*) AS mobile_count
FROM flipkart_mobiles
GROUP BY color
ORDER BY mobile_count DESC
LIMIT 10;
```

← QUERY

OUTPUT →

| color          | mobile_count |
|----------------|--------------|
| Black          | 473          |
| Gold           | 188          |
| White          | 153          |
| Blue           | 134          |
| Silver         | 94           |
| Red            | 76           |
| Grey           | 43           |
| Space Grey     | 36           |
| Midnight Black | 35           |
| Rose Gold      | 29           |

# 13.WHAT IS THE PRICE DISTRIBUTION BY MEMORY AND STORAGE COMBINATION?

```
SELECT memory, storage,  
       MIN(Selling_Price) AS min_price,  
       MAX(Selling_Price) AS max_price,  
       AVG(Selling_Price) AS avg_price  
FROM flipkart_mobiles  
GROUP BY Memory, storage  
ORDER BY Memory, storage  
limit 10;
```

← QUERY

OUTPUT →

|   | memory | storage               | min_price | max_price | avg_price   |
|---|--------|-----------------------|-----------|-----------|-------------|
| ▶ |        | 128 GB                | 119900    | 119900    | 119900.0000 |
|   |        | 2 MB                  | 1099      | 2299      | 1456.3684   |
|   |        | 256 GB                | 41996     | 129900    | 105999.3333 |
|   |        | 512 GB                | 149900    | 149900    | 149900.0000 |
|   |        | 64 GB                 | 39990     | 69990     | 54990.0000  |
|   |        | Expandable Upto 16 GB | 1625      | 2340      | 1945.4000   |
|   |        | Expandable Upto 32 GB | 3499      | 3499      | 3499.0000   |
|   | 1 GB   | 128 GB                | 48999     | 80500     | 64499.6000  |
|   | 1 GB   | 16 GB                 | 2799      | 52000     | 12411.1207  |
|   | 1 GB   | 32 GB                 | 30780     | 40699     | 34086.3333  |

**THANK  
YOU**