Project

iPhone
Sales

SUMMARY/ANSWERS WITH PLOTS

1. What are top 10 highest rated iphones in India?
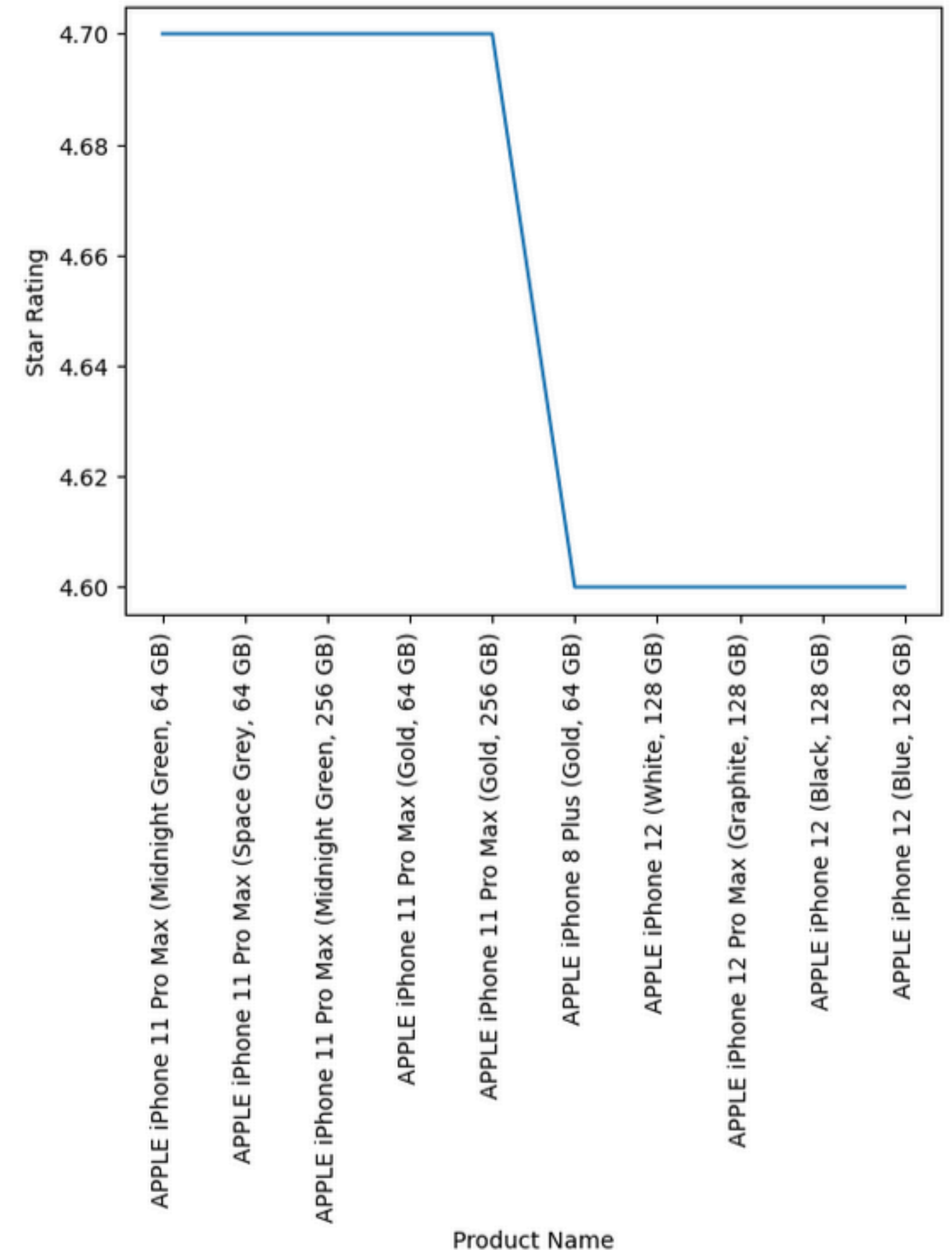
```python
highest_rating= df.sort_values(by= ['Star Rating'], ascending=False)
highest_rating= highest_rating.head(10)
```

```python
print(highest_rating['Product Name'])
```

```
20        APPLE iPhone 11 Pro Max (Midnight Green, 64 GB)
17          APPLE iPhone 11 Pro Max (Space Grey, 64 GB)
16       APPLE iPhone 11 Pro Max (Midnight Green, 256 GB)
15                APPLE iPhone 11 Pro Max (Gold, 64 GB)
14               APPLE iPhone 11 Pro Max (Gold, 256 GB)
0                     APPLE iPhone 8 Plus (Gold, 64 GB)
29                      APPLE iPhone 12 (White, 128 GB)
32          APPLE iPhone 12 Pro Max (Graphite, 128 GB)
35                      APPLE iPhone 12 (Black, 128 GB)
36                       APPLE iPhone 12 (Blue, 128 GB)
Name: Product Name, dtype: object
```

```python
plt.xticks(rotation=90)
p=sns.lineplot(x=highest_rating['Product Name'], y=highest_rating['Star Rating'])
```
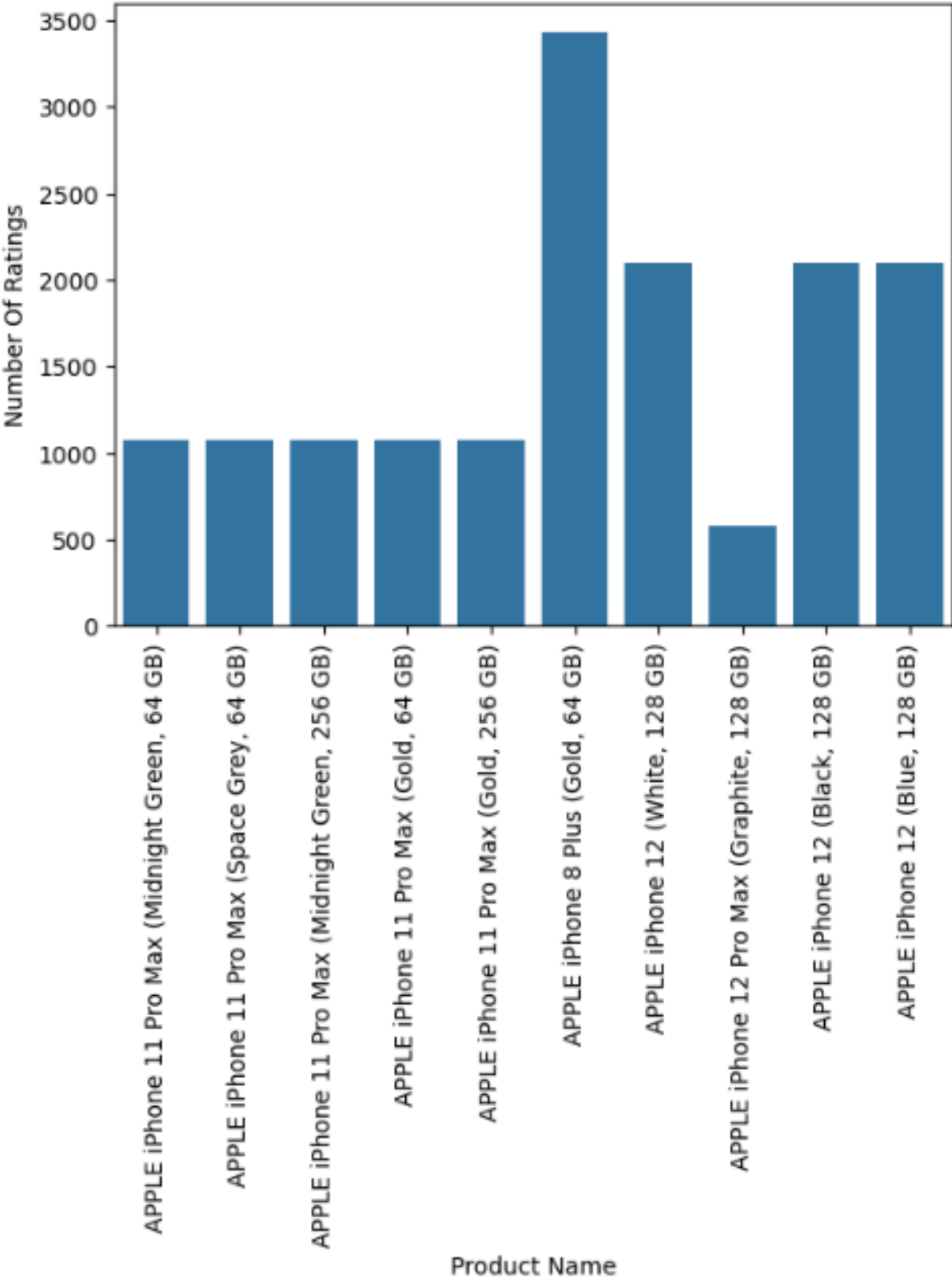
2. How many ratings do the highest rated iphones have?

```
[90]: val_count=highest_rating['Product Name'].value_counts()
      label=val_count.index
      counts=highest_rating['Number Of Ratings']

      plt.xticks(rotation=90)
      sns.barplot(x=label, y=counts)
```

```
[90]: <Axes: xlabel='Product Name', ylabel='Number Of Ratings'>
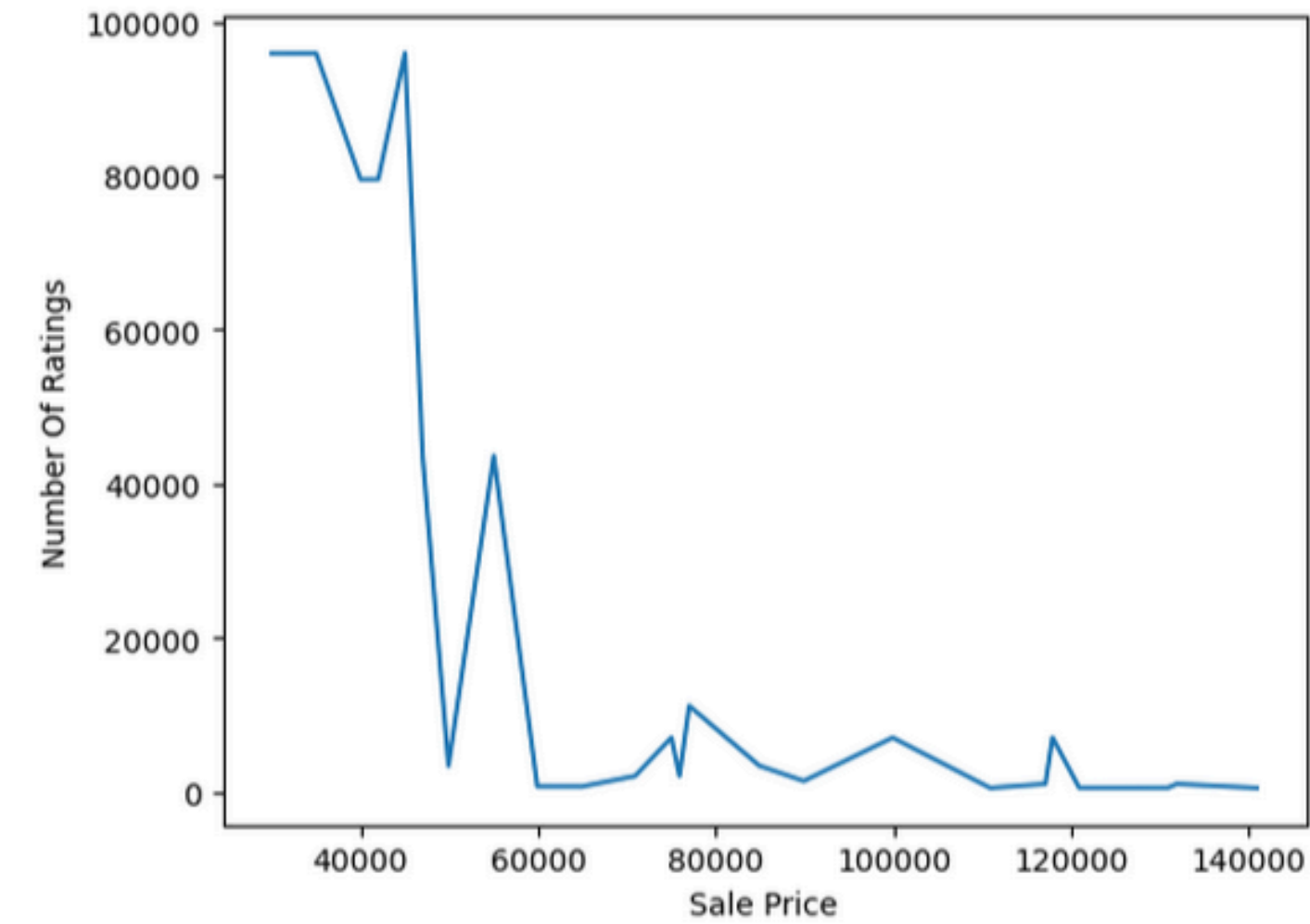```



## 3. Which iphone has the highest number of reviews?

```
highest_review=df.sort_values(by='Number Of Reviews', ascending=False)
highest_review=highest_review.head(1)
highest_review
```

	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage
23	Apple iPhone SE (White, 256 GB) (Includes EarP...	https://www.flipkart.com/apple-iphone-se-white...	Apple	44999	54900	18

4. What is relationship betweeen the sale price of iphones and the number of ratings?

```python
sns.lineplot(x=df['Sale Price'], y=df['Number Of Ratings'])
```
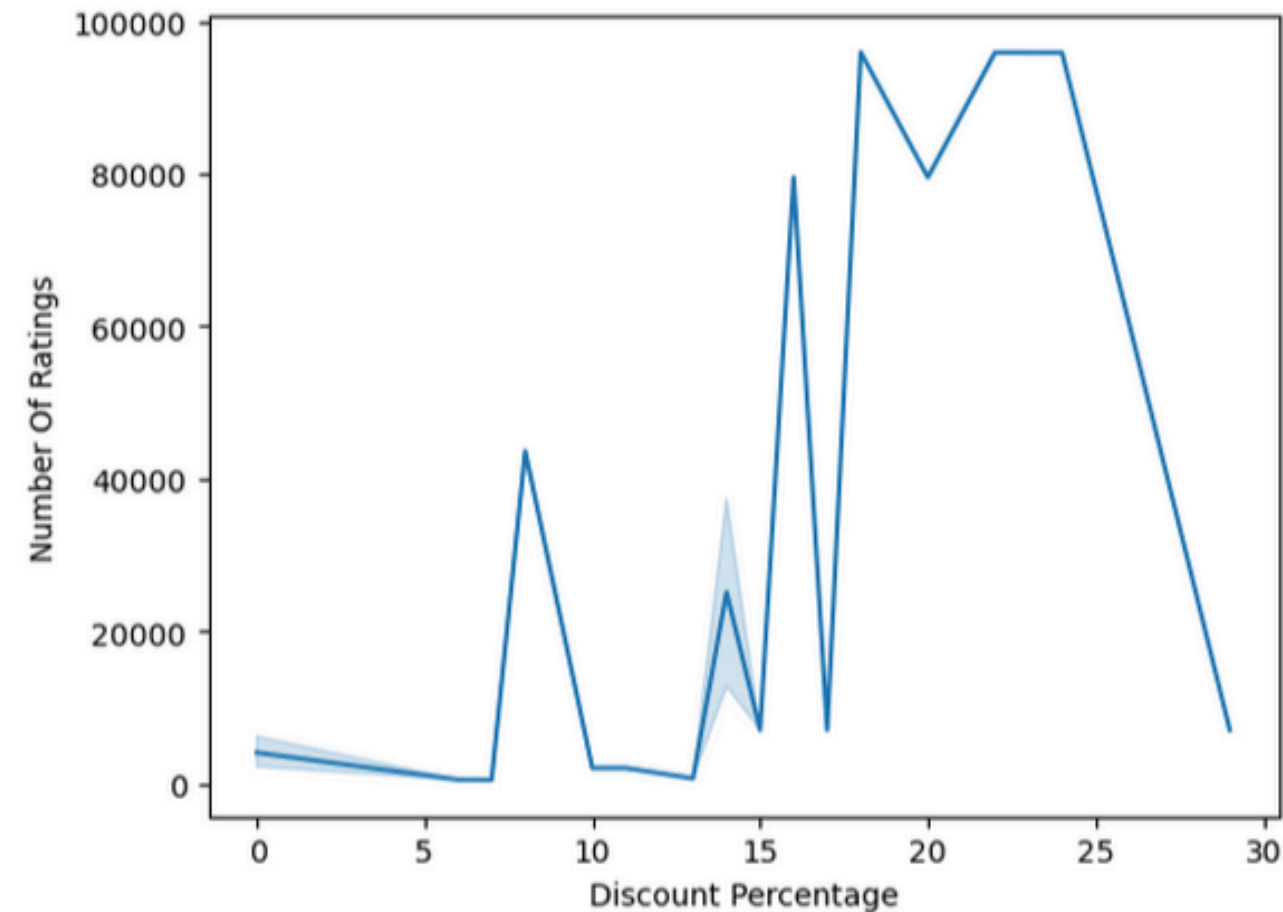
```
<Axes: xlabel='Sale Price', ylabel='Number Of Ratings'>
```


5. What is relationship betweeen the discount percentage and the number of rating of iphones?

```python
[6]: sns.lineplot(x=df['Discount Percentage'], y=df['Number Of Ratings'])
```

```
[6]: <Axes: xlabel='Discount Percentage', ylabel='Number Of Ratings'>
```

6. Can you figure out the least expensive and the most expensive iphones in Indian Market, along with all their specifications?

```
mrp=df.sort_values(by='Mrp', ascending=True)
least_expensive=mrp.head(1)
most_expensive=mrp.tail(1)
```

least_expensive

	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Upc	Star Rating	Ram
52	APPLE iPhone SE (White, 64 GB)	https://www.flipkart.com/apple-iphone-se-white...	Apple	29999	39900	24	95807	8154	MOBFWQ6BGWDVGF3E	4.5	2 GB

most_expensive

	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Upc	Star Rating	Ram
41	APPLE iPhone 12 Pro (Pacific Blue, 512 GB)	https://www.flipkart.com/apple-iphone-12-pro-p...	Apple	140900	149900	6	545	42	MOBFWBYZTHSXKMGW	4.5	4 GB

7. Provide url for all the phones with 6GB ram, also costs less than 1Lakh.

```python
required_phone=df[(df["Ram"]=="6 GB") & (df["Mrp"]<=100000)]
required_phone[["Product Name","Product URL"]]
```

	Product Name	Product URL
29	APPLE iPhone 12 (White, 128 GB)	https://www.flipkart.com/apple-iphone-12-white...
35	APPLE iPhone 12 (Black, 128 GB)	https://www.flipkart.com/apple-iphone-12-black...
36	APPLE iPhone 12 (Blue, 128 GB)	https://www.flipkart.com/apple-iphone-12-blue-...
38	APPLE iPhone 12 Mini (Red, 64 GB)	https://www.flipkart.com/apple-iphone-12-mini-...
40	APPLE iPhone 12 (Green, 128 GB)	https://www.flipkart.com/apple-iphone-12-green...
42	APPLE iPhone 12 (White, 64 GB)	https://www.flipkart.com/apple-iphone-12-white...
43	APPLE iPhone 12 (Black, 64 GB)	https://www.flipkart.com/apple-iphone-12-black...
44	APPLE iPhone 12 (Red, 128 GB)	https://www.flipkart.com/apple-iphone-12-red-1...

Thank You