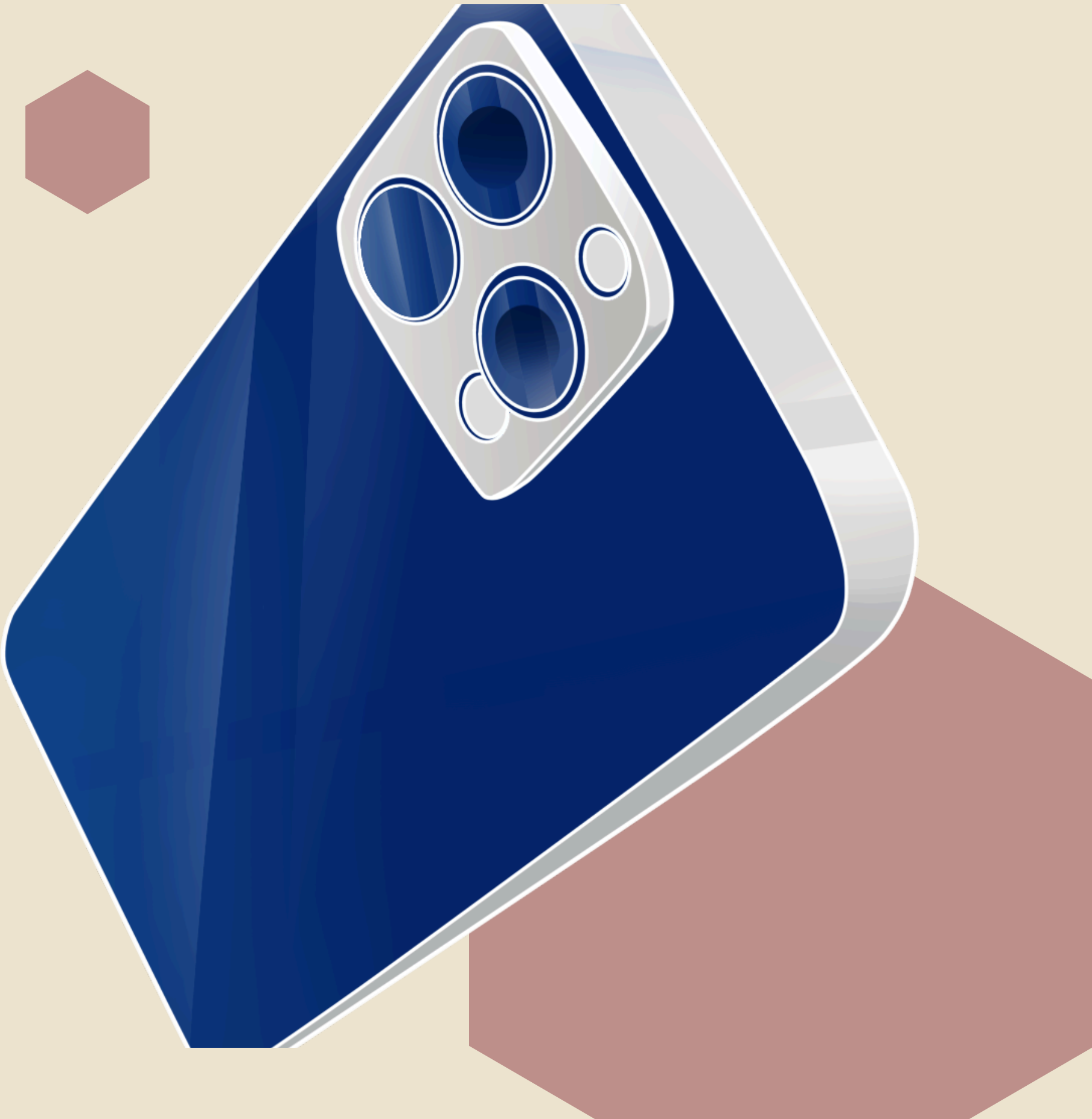


vanshika pachauri

IPHONE SALES ANALYSIS PROJECT REPORT



INTRODUCTION

This project analyzes iPhone sales data using Python tools like Pandas, NumPy, and Plotly to uncover key insights. The analysis will address six key business questions, including sales trends, regional performance, and the impact of pricing and promotions, to help guide strategic decision-making.

SOLVED PROBLEMS

1. What are the top 10 highest rated iPhone on flipkart in India?
2. How many ratings do the highest rated iPhones on flipkart have?
3. Which iPhone has the highest number of reviews on flipkart?
4. What is the relationship between the sale price of iPhone and the number of ratings on flipkart?
5. What is the relationship between the discount percentage and the number of ratings on flipkart?
6. Can you figure out the least expensive and most expensive iPhones in the India market, along with all their specifications?

1) Top 10 highest rated iphones

```
highest Rated = data.sort_values(by=["Star Rating"],ascending=False)
highest Rated = highest Rated.head(10)
print(highest Rated['Product Name'])
```

APPLE iPhone 11 Pro Max (Midnight Green, 64 GB)

APPLE iPhone 11 Pro Max (Space Grey, 64 GB)

APPLE iPhone 11 Pro Max (Midnight Green, 256 GB)

APPLE iPhone 11 Pro Max (Gold, 64 GB)

APPLE iPhone 11 Pro Max (Gold, 256 GB)

APPLE iPhone 8 Plus (Gold, 64 GB)

APPLE iPhone 12 (White, 128 GB)

APPLE iPhone 12 Pro Max (Graphite, 128 GB)

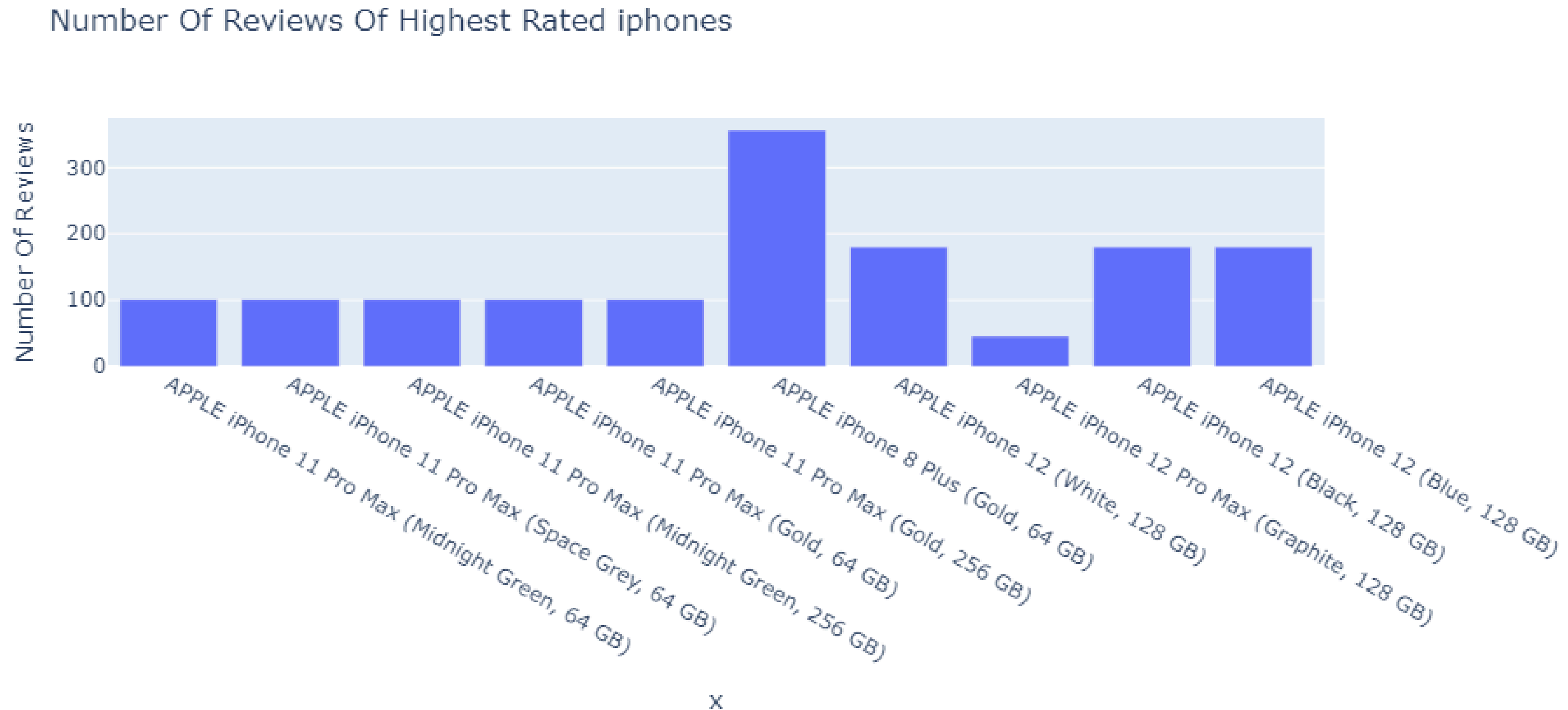
APPLE iPhone 12 (Black, 128 GB)

APPLE iPhone 12 (Blue, 128 GB)

me: Product Name, dtype: object

2) ratings of highest rated iphonest

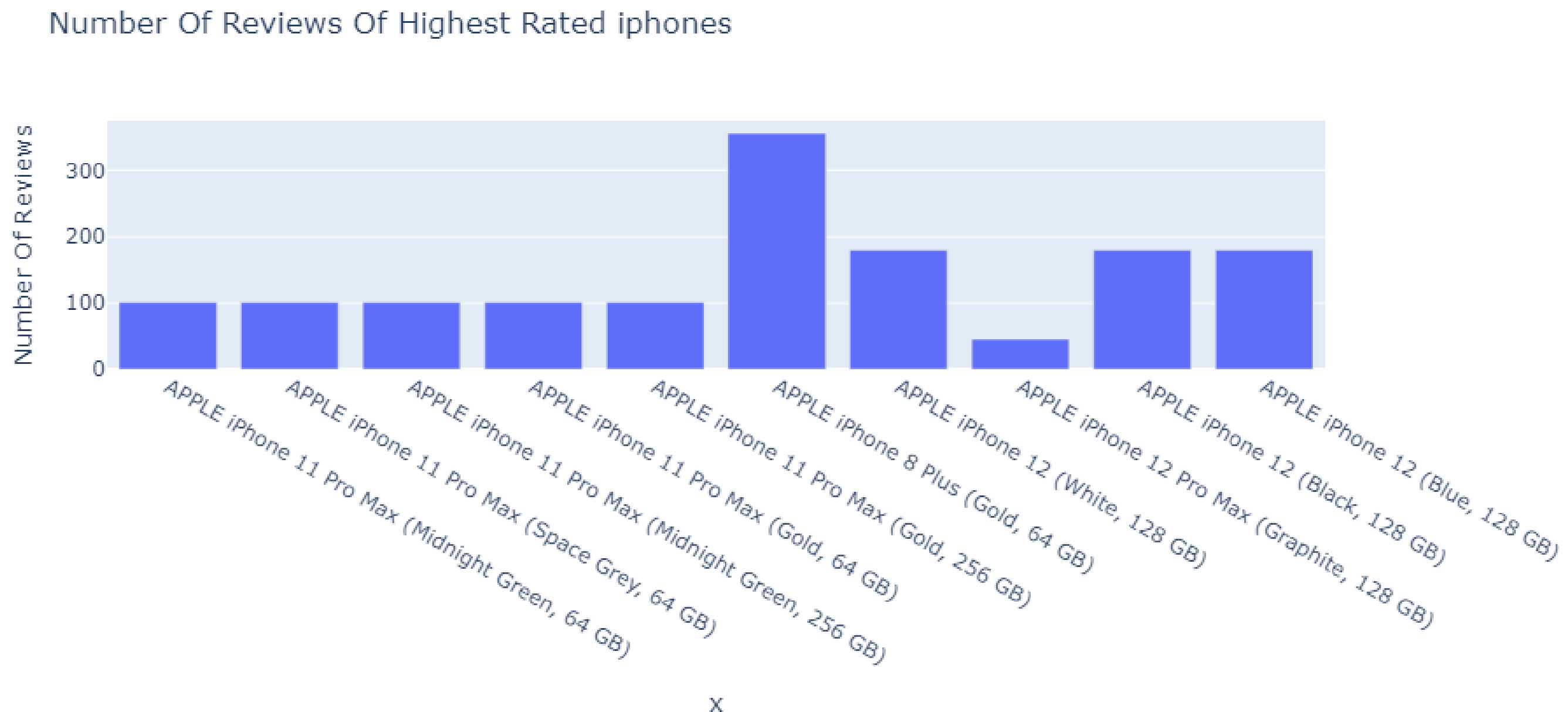
```
iphones = highest_rated["Product Name"].value_counts()  
label = iphones.index  
counts = highest_rated["Number Of Ratings"]  
figure = px.bar(highest_rated, x=label, y = counts, title ="Number Of Ratings Of Highest Rated iphones")  
figure.show()
```



3) Highest number of views

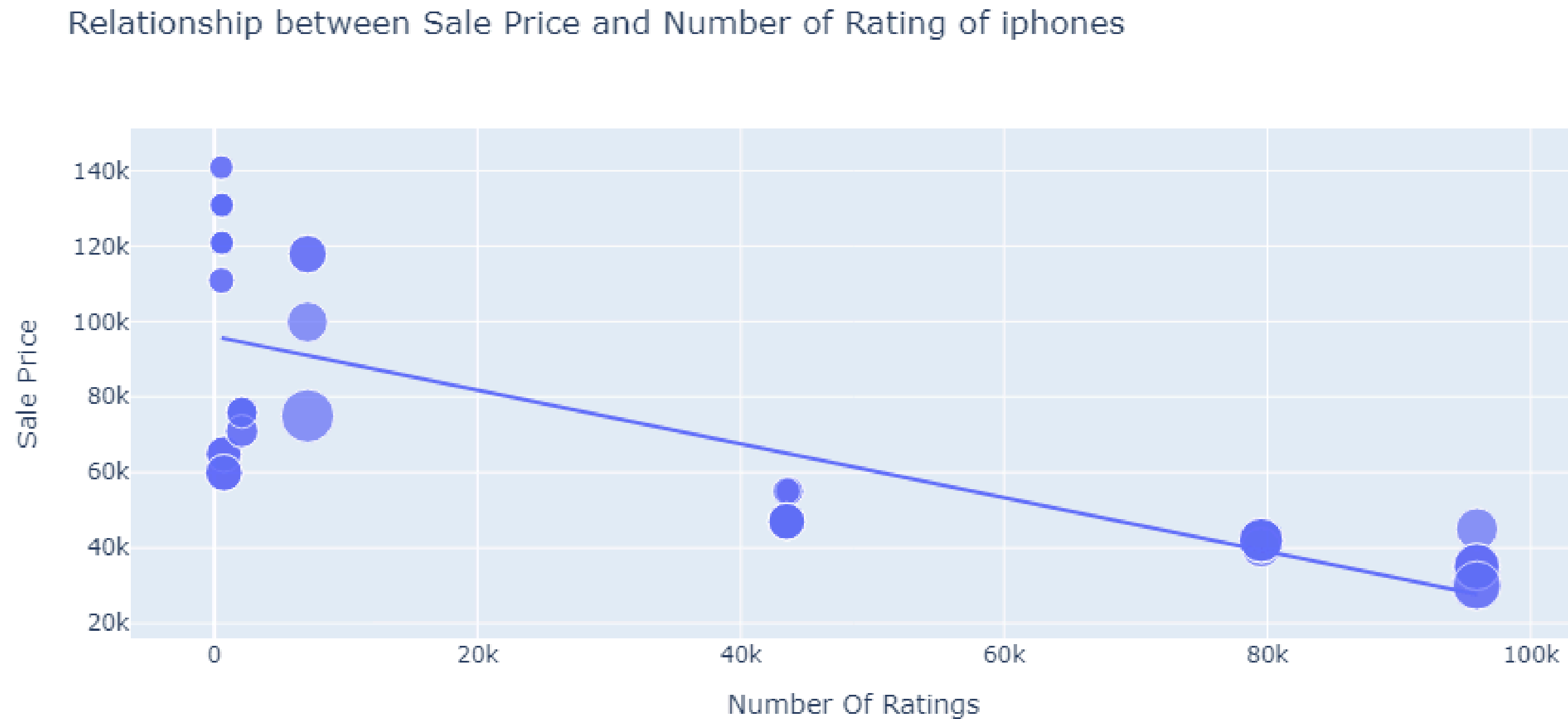


```
iphones = highest_rated["Product Name"].value_counts()
label = iphones.index
counts = highest_rated["Number Of Reviews"]
figure = px.bar(highest_rated, x=label, y = counts, title="Number Of Reviews Of Highest Rated iphones")
figure.show()
```



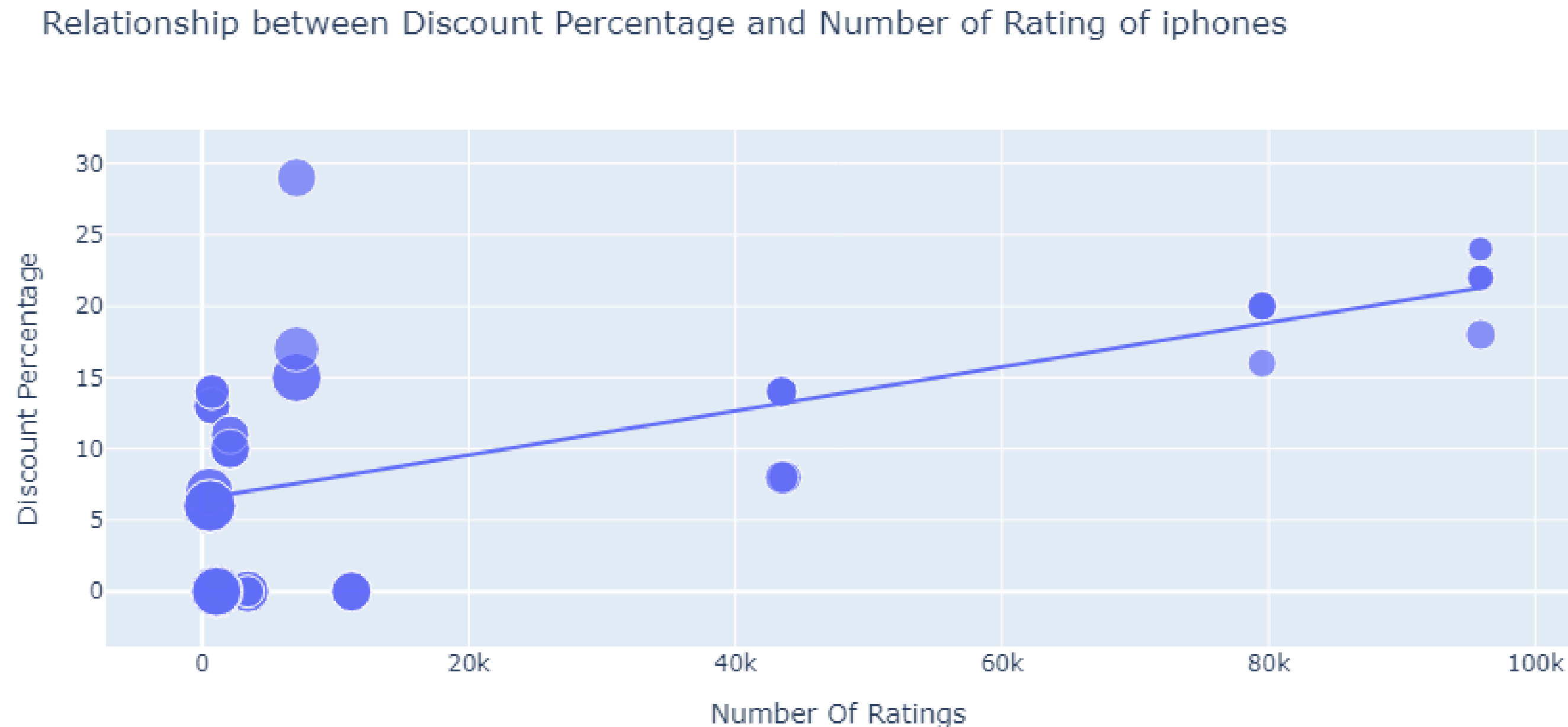
4) relationship between sales price and the number of rating

```
figure = px.scatter(data_frame = data , x="Number Of Ratings", y="Sale Price",size="Discount Percentage",  
trendline = "ols",title = "Relationship between Sale Price and Number of Rating of iphones")  
figure.show()
```



5) relationship between discount percentage and the number of ratings

```
figure = px.scatter(data_frame = data , x="Number Of Ratings", y="Discount Percentage",size="Sale Price",  
trendline = "ols",title = "Relationship between Discount Percentage and Number of Rating of iphones")  
figure.show()
```



6) Least and most Expensive iphone with their specifications

```
most_expensive = data.loc[data['Sale Price'].idxmax()]
least_expensive = data.loc[data['Sale Price'].idxmin()]

print("Most Expensive Product:")
print(most_expensive)
print("\nLeast Expensive Product:")
print(least_expensive)
```

Most Expensive Product:

| | |
|---------------------|---|
| Product Name | APPLE iPhone 12 Pro (Silver, 512 GB) |
| Product URL | https://www.flipkart.com/apple-iphone-12-pro-s... |
| Brand | Apple |
| Sale Price | 140900 |
| Mrp | 149900 |
| Discount Percentage | 6 |
| Number Of Ratings | 542 |
| Number Of Reviews | 42 |
| Upc | MOBFWBYZ5UY6ZBVA |
| Star Rating | 4.5 |
| Ram | 4 GB |

Name: 24, dtype: object

Least Expensive Product:

| | |
|---------------------|---|
| Product Name | APPLE iPhone SE (White, 64 GB) |
| Product URL | https://www.flipkart.com/apple-iphone-se-white... |
| Brand | Apple |
| Sale Price | 29999 |
| Mrp | 39900 |
| Discount Percentage | 24 |
| Number Of Ratings | 05007 |