

Iphone sales Data analysis Project



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Problems

+ Problem 1,2

- ~What are the top 10 highest-rated iphones on Flipkart India?
- ~How many ratings do the highest -rated iphones on Flipkart have?

+ Problem 3,4

- ~Which iphone has the highest number of reviews on Flipkart?
- ~What is the relationship between the sale price of iphones and the number of ratings on flipkart?



+ Problem 5,6

- ~What is the relationship between the discount percentage and the number of ratings of iphones of iphones on Flipkart?
- ~Can you figure out the least expensive and most expensive iphones in the Indian,market ,along with all their specifications?

Solution 1 🔍

Here i just sorted the highest rated ones in a descending manner using the built in function `sort_values`



```
jupyter iphone sales data analysis Last Checkpoint: 18 minutes ago
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[25]: highestRated = data.sort_values(by=["Star Rating"], ascending=False)
      highestRated = highestRated.head(10)

[27]: print(highestRated["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

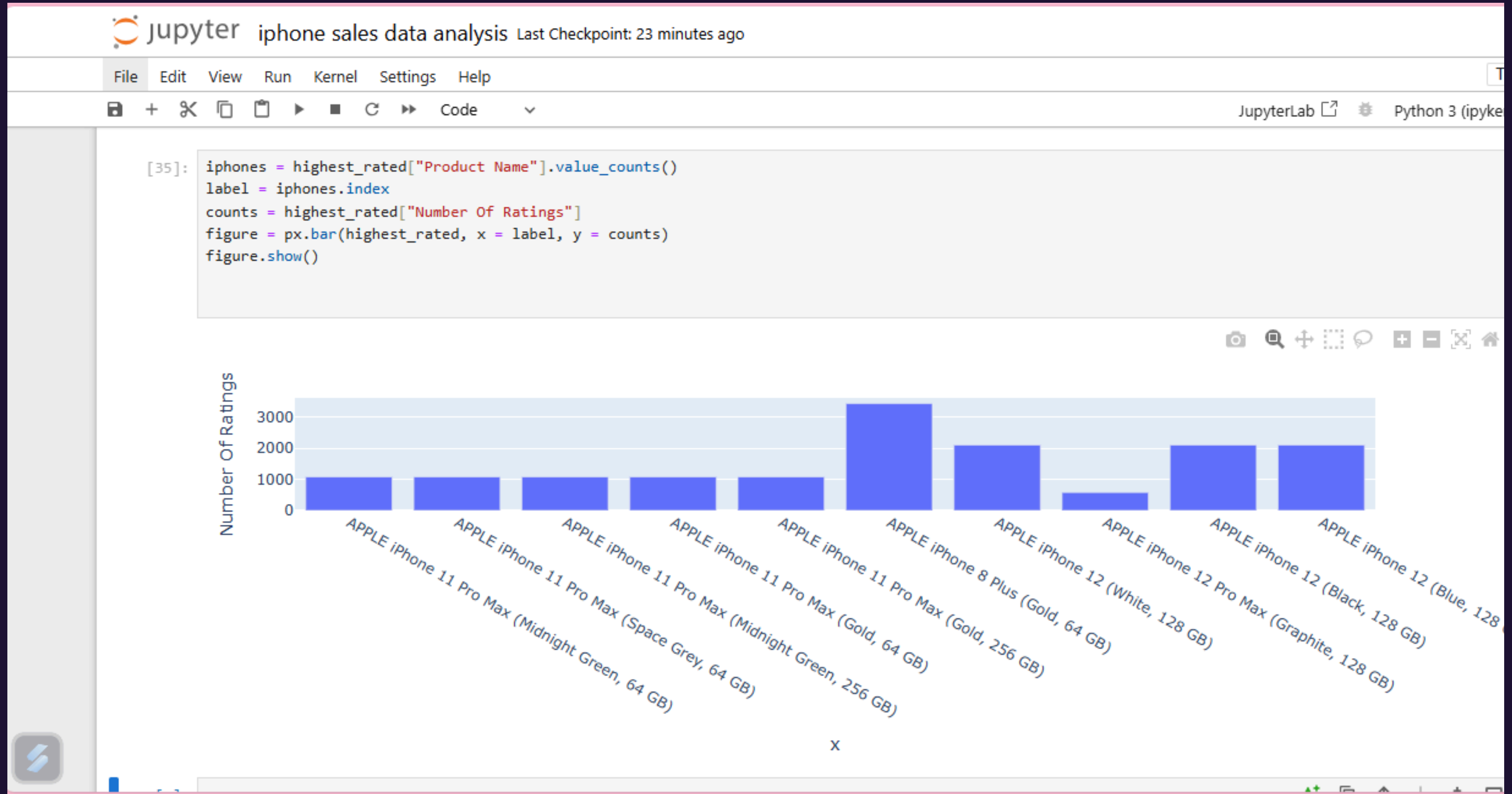
[29]: print(highestRated)

              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)
```

Solution 2



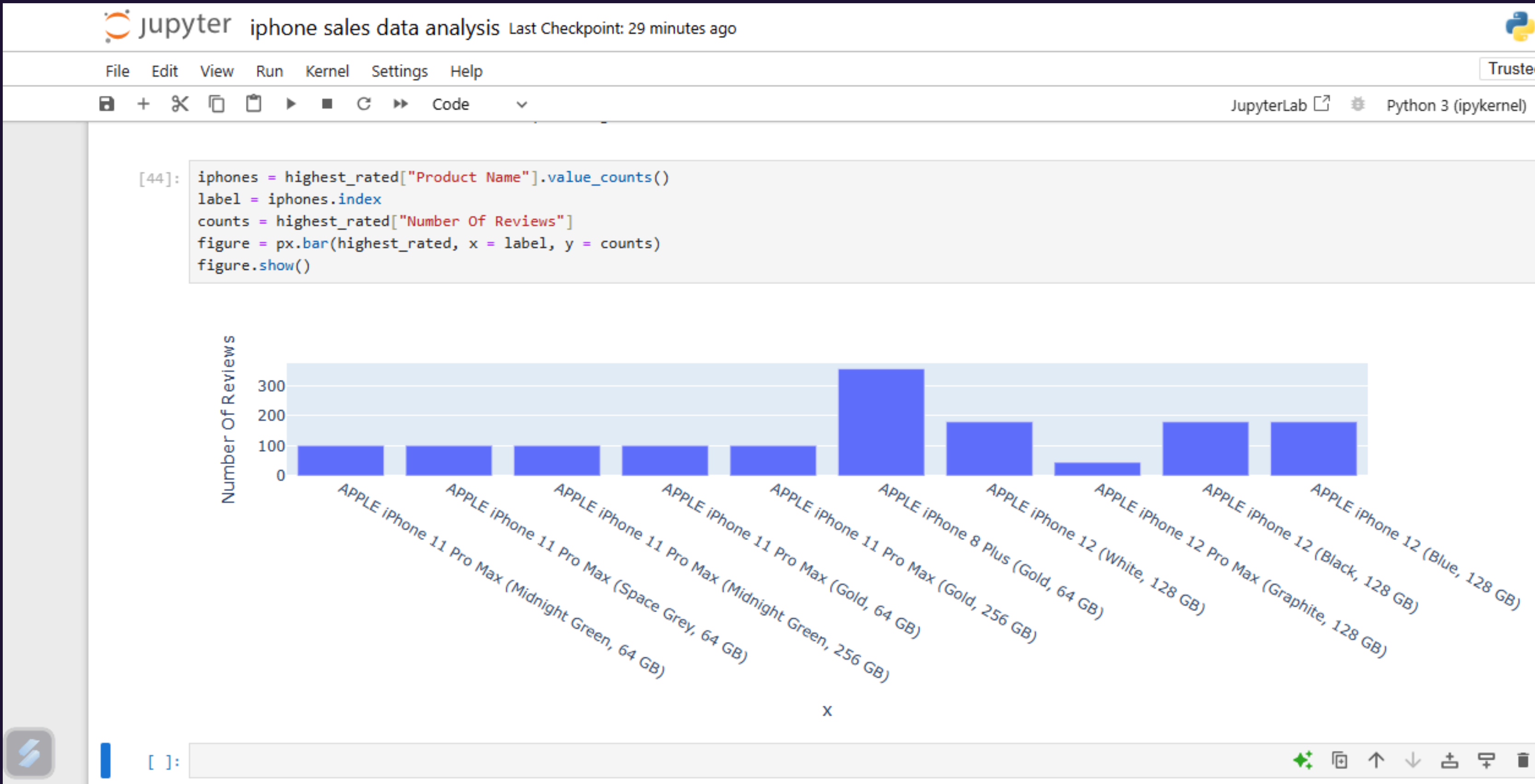
for solution 2 i showed the ratings of the highest rated iphones on flipkart through bar graph.



Solution 3



for solution 3 i modified the variable counts to counts =['Number Of Reviews']



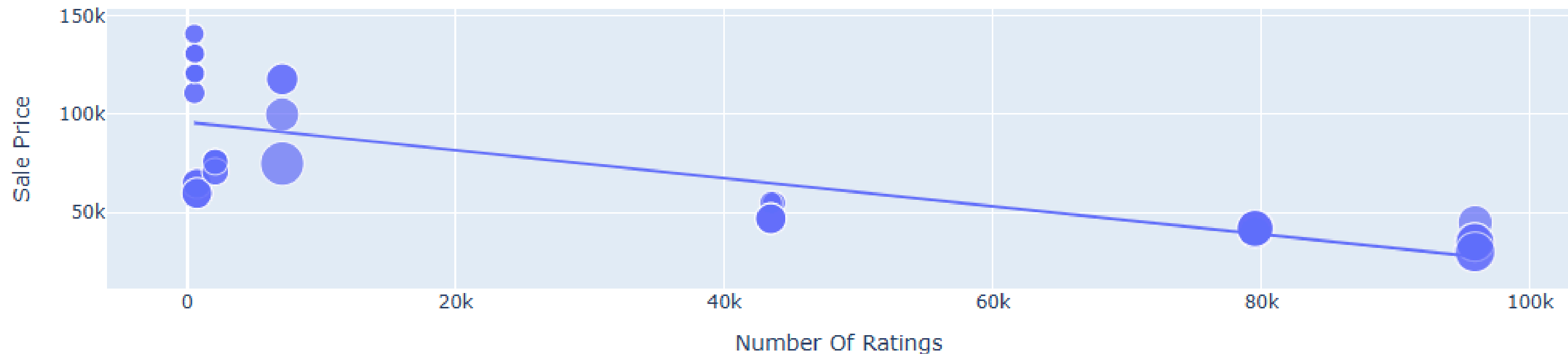
Solution 4 🔍



Here i showed the relation between sale price of iphones and the number of ratings on Flipkart using scatterplot graph.

```
[52]: figure = px.scatter(data_frame = data , x = "Number Of Ratings", y = "Sale Price",size = 'Discount Percentage', trendline = 'ols',title = "relationship b  
figure.show()
```

relationship between sales price and number pf rating



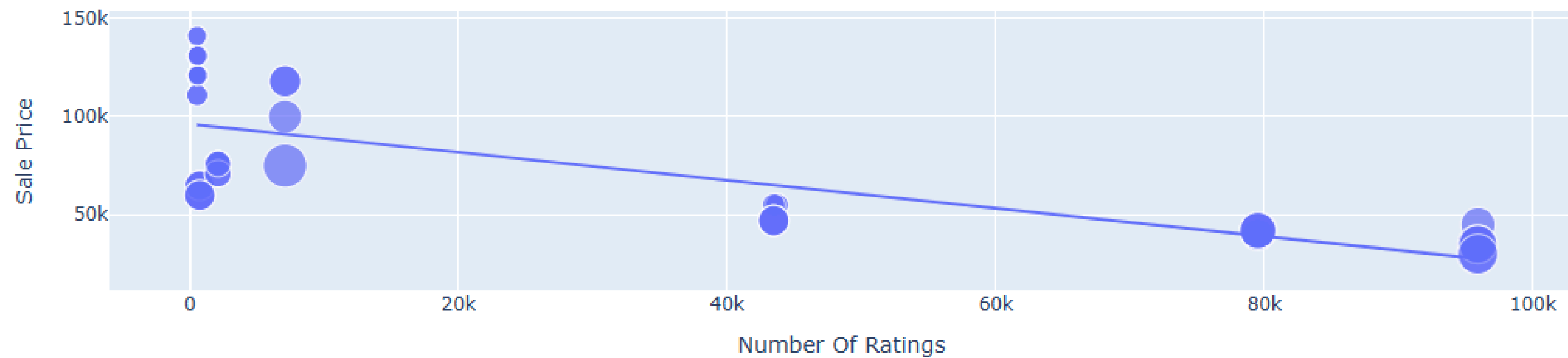


Solution 5 🔍

its similar to solution 4 here also i showed the relation between discount percentage and the number of ratings on Flipkart using scatterplot graph.

```
[54]: x = "Number Of Ratings", y = "Sale Price",size = 'Discount Percentage', trendline = 'ols',title = "relationship between sales price and number of rating"
```

relationship between sales price and number of rating



Solution 6 🔍

here i just made two variables named by most_expensive and least_expensive and sorted them by using builtin functions idxmax,idxmin



```
[66]: 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	MOBFNBYZ5UY6ZBVA
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	95807

Conclusion :



- ~ This analysis identified the top 10 highest_rated iphones available on flipkart in India.**
- ~The top rated iphones have garnered a significant number of ratings ,reflecting both their popularity and customer satisfaction.**
- ~The analysis reveals a moderate negative correlation between the sale price of iphones and the number of ratings they receive, Lower-price iphones tend to attract more ratings,possibly due to their affordability and appeal to broader customer base.**

Conclusion :



- ~ A positive trend is observed between the discount percentage offered on iPhones and the number of ratings. Higher discounts generally lead to increased purchases and, consequently, more customer feedback, highlighting the impact of pricing strategies on customer behaviour.**
- ~The iPhone SE(2020) stands out as the most affordable option.**
- ~The iPhone 12 Pro is the most premium one .**