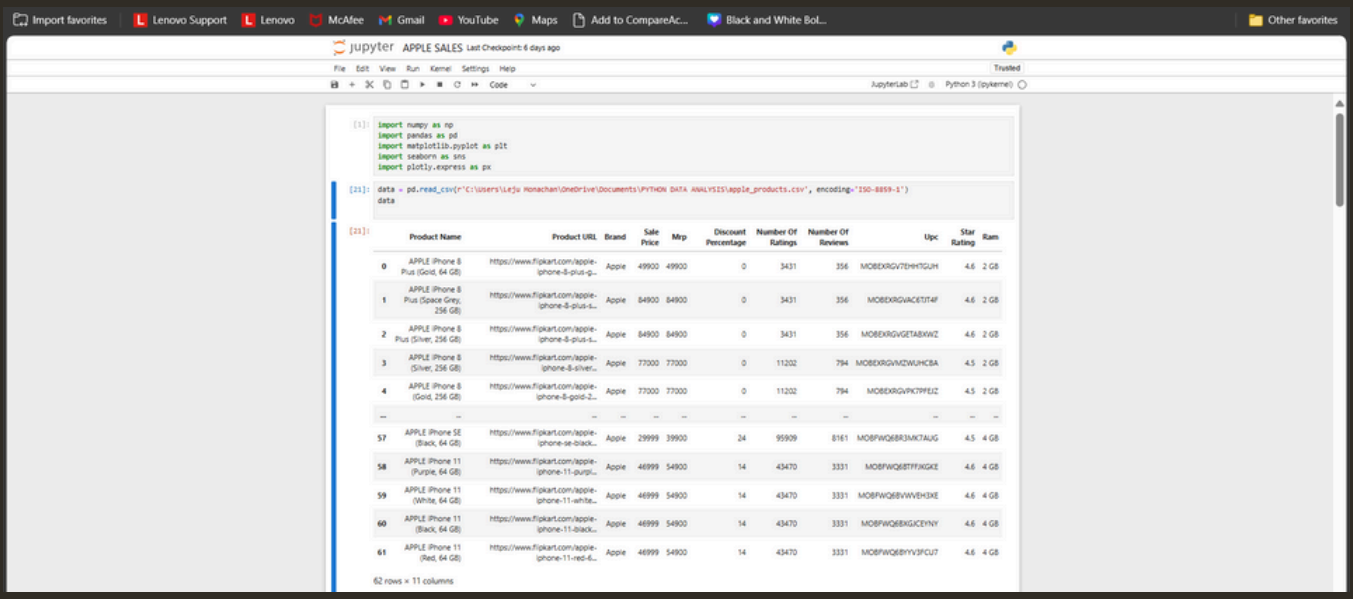
IPHONE SALES

DATA ANALYSIS PROJECT USING PYTHON

LEJU MONACHAN

APPLE IPHONE SALES DATA SET



jupyter APPLE SALES Last Checkpoint: 6 days ago

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.express as px
```

```
data = pd.read_csv(r"C:\Users\Leju Monachan\OneDrive\Documents\PYTHON DATA ANALYSIS\apple_products.csv", encoding='ISO-8859-1')
data
```

	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Upc	Star Rating	Ram
0	APPLE iPhone 8 Plus (Gold, 64 GB)	https://www.flipkart.com/apple-iphone-8-plus-g...	Apple	49900	49900	0	3431	356	MOBEXRGV7EHHTGUH	4.6	2 GB
1	APPLE iPhone 8 Plus (Space Grey, 256 GB)	https://www.flipkart.com/apple-iphone-8-plus-s...	Apple	84900	84900	0	3431	356	MOBEXRGVAC6TJT4F	4.6	2 GB
2	APPLE iPhone 8 Plus (Silver, 256 GB)	https://www.flipkart.com/apple-iphone-8-plus-s...	Apple	84900	84900	0	3431	356	MOBEXRGVGETABXWZ	4.6	2 GB
3	APPLE iPhone 8 (Silver, 256 GB)	https://www.flipkart.com/apple-iphone-8-silver...	Apple	77000	77000	0	11202	794	MOBEXRGVMZWUHCBA	4.5	2 GB
4	APPLE iPhone 8 (Gold, 256 GB)	https://www.flipkart.com/apple-iphone-8-gold-2...	Apple	77000	77000	0	11202	794	MOBEXRGVPK7PFEJZ	4.5	2 GB
...	...	...	...	...	...	...	...	...	...	...	...
57	APPLE iPhone SE (Black, 64 GB)	https://www.flipkart.com/apple-iphone-se-black...	Apple	29999	39900	24	95909	8161	MOBFWQ6BR3MK7AUG	4.5	4 GB
58	APPLE iPhone 11 (Purple, 64 GB)	https://www.flipkart.com/apple-iphone-11-purpl...	Apple	46999	54900	14	43470	3331	MOBFWQ6BTTFJKGKE	4.6	4 GB
59	APPLE iPhone 11 (White, 64 GB)	https://www.flipkart.com/apple-iphone-11-white...	Apple	46999	54900	14	43470	3331	MOBFWQ6BVWVEH3XE	4.6	4 GB
60	APPLE iPhone 11 (Black, 64 GB)	https://www.flipkart.com/apple-iphone-11-black...	Apple	46999	54900	14	43470	3331	MOBFWQ6BXGJCEYNY	4.6	4 GB
61	APPLE iPhone 11 (Red, 64 GB)	https://www.flipkart.com/apple-iphone-11-red-6...	Apple	46999	54900	14	43470	3331	MOBFWQ6BYYV3FCU7	4.6	4 GB

62 rows × 11 columns

TOP TEN HIGHEST RATED IPHONE ON FLIPKART IN INDIA

Top TEN HIGHEST RATED IPHONES ON FLIPKART IN INDIA

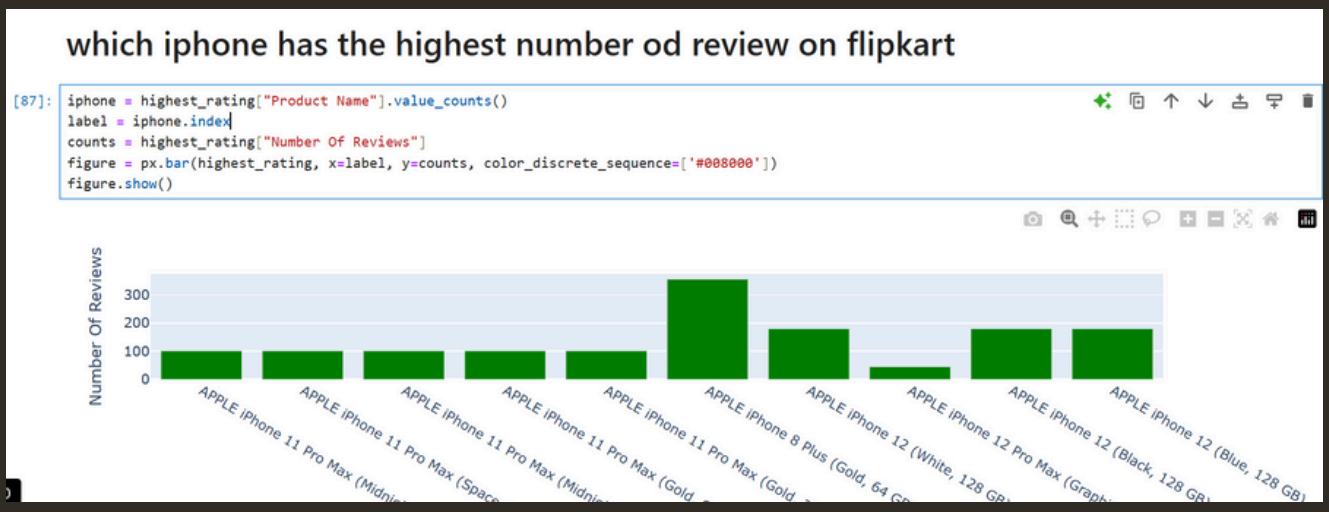
```
[15]: highest_rating = data.sort_values(by='Star Rating', ascending=False)
highest_rating = highest_rating.head(10)
print(highest_rating["Product Name"])
```

```
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
```

#How many rating do the highest -rated iphones on flikart have

TOP TEN HIGHEST RATED IPHONE ON FLIPKART IN INDIA?

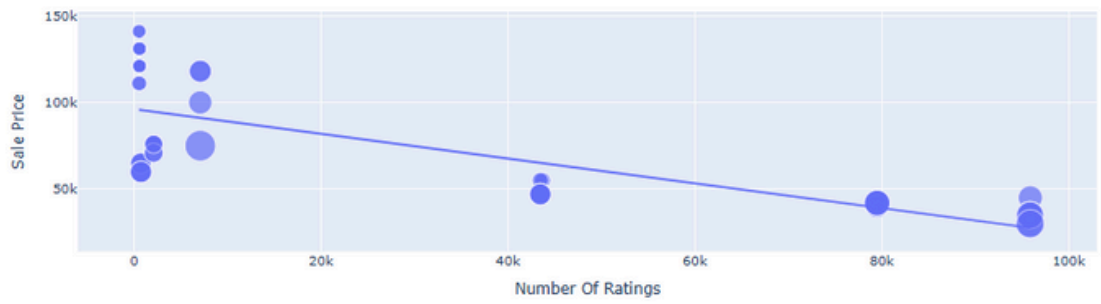
WHICH IPHONE HAS THE HIGHEST NUMBER OF REVIEWS ON FLIPKART ?



WHAT IS THE RELATIONSHIP BETWEEN THE SALES PRICE OF IPHONES AND THE NUMBER OF RATINGS ON FLIPKART ?

what is the relationship between sales price of an iphone and the number of ratings on flipkart

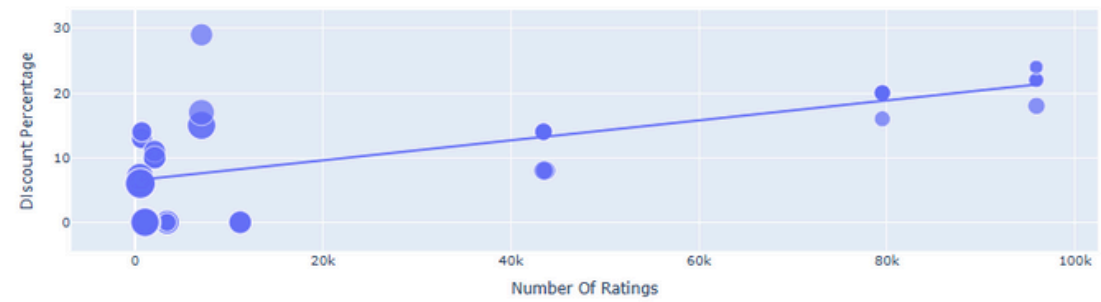
```
[73]: fig = px.scatter(data_frame = data, x = "Number Of Ratings" , y ="Sale Price",size = "Discount Percentage", trendline = "ols" )
fig
```



WHAT IS THE RELATIONSHIP BETWEEN THE DISCOUNT PERCETAGE AND THE NUMBER OF RATING OF IPHONES ON FLIPKART ?

what is the relationship between the discount percentage of an iphone and the number of ratings on flipkart

```
[71]: fig = px.scatter(data_frame = data, x = "Number Of Ratings" , y ="Discount Percentage",size = "Sale Price", trendline = "ols" )
fig
```



CAN YOU FIGURE OUT THE LEAST EXPENSIVE AND MOST EXPENSIVE IPHONES IN THE INDIAN MARKET ALONE WITH ALL THEIR SPECIFICATIONS?

MOST EXPENSIVE AND LEAST EXPENSIVE ON SALES PRICE

[44]:
```
Max = data.loc[data["Sale Price"].idxmax()]
Min = data.loc[data["Sale Price"].idxmin()]

print("MOST EXPENSIVE PRODUCT ")
print(Max)
print("/nLEAST  EXPENSIVE PRODUCT ")
print(Min)
```

```
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
/nLEAST  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
Number Of Reviews                                                    8154
Upc                                                        MOBFWQ6BGNDVGF3E
Star Rating                                                           4.5
Ram                                                                 2 GB
Name: 52, dtype: object
```