

```
In [1]: import pandas as pd

import plotly.express as px
import plotly.graph_objects as go
```

```
In [2]: df = pd.read_csv(r'/Users/jasmylenson/Documents/Pandas/ReadingFile/apple_products.csv')
df
```

Out[2]:

	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	MOBEXRGVVPK7PFEJZ	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	MOBFWQ6BTFFJKGKE	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

```
In [3]: pd.set_option('display.max_rows', 63)
```

```
In [4]: pd.set_option('display.max_columns', 12)
```

```
In [5]: df.shape
```

Out[5]: (62, 11)

```
In [6]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 62 entries, 0 to 61
Data columns (total 11 columns):
#   Column              Non-Null Count  Dtype
---  -
0   Product Name        62 non-null    object
1   Product URL         62 non-null    object
2   Brand               62 non-null    object
3   Sale Price          62 non-null    int64
4   Mrp                 62 non-null    int64
5   Discount Percentage 62 non-null    int64
6   Number Of Ratings   62 non-null    int64
7   Number Of Reviews   62 non-null    int64
8   Upc                 62 non-null    object
9   Star Rating         62 non-null    float64
10  Ram                 62 non-null    object
dtypes: float64(1), int64(5), object(5)
memory usage: 5.5+ KB
```

In [7]:

dataset contains any null values or not:

df.drop_duplicates()

	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
5	APPLE iPhone 8 Plus (Silver, 64 GB)	https://www.flipkart.com/apple-iphone-8-plus-s...	Apple	49900	49900	0	3431	356	MOBEXRGVQGYYP8FV	4.6	2 GB
6	APPLE iPhone 8 Plus (Space Grey, 64 GB)	https://www.flipkart.com/apple-iphone-8-plus-s...	Apple	49900	49900	0	3431	356	MOBEXRGVQKBREZP8	4.6	2 GB
7	APPLE iPhone 8 (Space Grey, 256 GB)	https://www.flipkart.com/apple-iphone-8-space-...	Apple	77000	77000	0	11202	794	MOBEXRGVZFZGZEWV	4.5	2 GB
8	APPLE iPhone XS Max (Silver, 64 GB)	https://www.flipkart.com/apple-iphone-xs-max-s...	Apple	89900	89900	0	1454	149	MOBF944E2XAHW8V5	4.6	4 GB
9	Apple iPhone XR ((PRODUCT)RED, 128 GB) (Includ...	https://www.flipkart.com/apple-iphone-xr-produ...	Apple	41999	52900	20	79512	6796	MOBF9Z7ZHQC23PWQ	4.6	4 GB
10	Apple iPhone XR (Black, 64 GB) (Includes EarPo...	https://www.flipkart.com/apple-iphone-xr-black...	Apple	39999	47900	16	79512	6796	MOBF9Z7ZPHGV4GNH	4.6	4 GB
11	Apple iPhone XR (Coral, 128 GB) (Includes EarP...	https://www.flipkart.com/apple-iphone-xr-coral...	Apple	41999	52900	20	79582	6804	MOBF9Z7ZS6GF5UAP	4.6	4 GB
12	Apple iPhone XR (Black, 128 GB) (Includes EarP...	https://www.flipkart.com/apple-iphone-xr-black...	Apple	41999	52900	20	79512	6796	MOBF9Z7ZYWNFGZUC	4.6	3 GB
13	Apple iPhone XR (White, 128 GB) (Includes EarP...	https://www.flipkart.com/apple-iphone-xr-white...	Apple	41999	52900	20	79512	6796	MOBF9Z7ZZY3HCDZZ	4.6	4 GB
14	APPLE iPhone 11 Pro Max (Gold, 256 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	131900	131900	0	1078	101	MOBFKCTS7HCHSPFH	4.7	4 GB
15	APPLE iPhone 11 Pro Max (Gold, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117100	117100	0	1078	101	MOBFKCTSAPAYNSGG	4.7	4 GB
16	APPLE iPhone 11 Pro Max (Midnight Green, 256 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	131900	131900	0	1078	101	MOBFKCTSCAAKGQV7	4.7	4 GB
17	APPLE iPhone 11 Pro Max (Space Grey, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117100	117100	0	1078	101	MOBFKCTSKDMKCGQS	4.7	4 GB
18	APPLE iPhone 11 Pro (Midnight Green, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	74999	106600	29	7088	523	MOBFKCTSN3TG3RFJ	4.6	4 GB
19	APPLE iPhone 11 Pro (Space Grey, 512 GB)	https://www.flipkart.com/apple-iphone-11-pro-s...	Apple	117900	140300	15	7088	523	MOBFKCTSRTHRQTFT	4.6	4 GB
20	APPLE iPhone 11 Pro Max (Midnight Green, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117100	117100	0	1078	101	MOBFKCTSRYP AQNYT	4.7	4 GB
21	APPLE iPhone 11 Pro (Midnight Green, 512 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117900	140300	15	7088	523	MOBFKCTSSJCWYGCC	4.6	4 GB
22	APPLE iPhone 11 Pro (Space Grey, 256 GB)	https://www.flipkart.com/apple-iphone-11-pro-s...	Apple	99900	121300	17	7081	522	MOBFKCTSWGYSAS9X	4.6	4 GB
23	Apple iPhone SE (White, 256 GB) (Includes EarP...	https://www.flipkart.com/apple-iphone-se-white...	Apple	44999	54900	18	95909	8161	MOBFRFXHPZCHAPFH	4.5	2 GB
24	APPLE iPhone 12 Pro (Silver, 512 GB)	https://www.flipkart.com/apple-iphone-12-pro-s...	Apple	140900	149900	6	542	42	MOBFWBYZ5UY6ZBVA	4.5	4 GB
25	APPLE iPhone 12 Pro Max (Pacific Blue, 256 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	130900	139900	6	580	45	MOBFWBYZ8STJXCVT	4.6	6 GB
26	APPLE iPhone 12 Mini (White, 128 GB)	https://www.flipkart.com/apple-iphone-12-mini-...	Apple	64900	74900	13	740	64	MOBFWBYZAGXJRDGB	4.5	4 GB
27	APPLE iPhone 12 Pro (Graphite, 256 GB)	https://www.flipkart.com/apple-iphone-12-pro-g...	Apple	120900	129900	6	545	42	MOBFWBYZBA36UB7G	4.5	6 GB
28	APPLE iPhone 12 Mini (White, 64 GB)	https://www.flipkart.com/apple-iphone-12-mini-...	Apple	59900	69900	14	740	64	MOBFWBYZBH4CEC4C	4.5	4 GB
29	APPLE iPhone 12 (White, 128 GB)	https://www.flipkart.com/apple-iphone-12-white...	Apple	75900	84900	10	2101	180	MOBFWBYZBTZFGJF9	4.6	6 GB
30	APPLE iPhone 12 Pro (Graphite, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-g...	Apple	110900	119900	7	545	42	MOBFWBYZBZ7Y56WD	4.5	6 GB
31	APPLE iPhone 12 Pro Max (Graphite, 256 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	130900	139900	6	580	45	MOBFWBYZEF6XQ5ZW	4.6	6 GB
32	APPLE iPhone 12 Pro Max (Graphite, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	120900	129900	6	580	45	MOBFWBYZFDGQSDWS	4.6	6 GB
33	APPLE iPhone 12 Mini (Black, 128 GB)	https://www.flipkart.com/apple-iphone-12-mini-...	Apple	64900	74900	13	730	63	MOBFWBYZH2AMPNPD	4.5	4 GB
34	APPLE iPhone 12 Mini (Blue, 128 GB)	https://www.flipkart.com/apple-iphone-12-mini-...	Apple	64900	74900	13	730	63	MOBFWBYZHU58PHCZ	4.5	4 GB
35	APPLE iPhone 12 (Black, 128 GB)	https://www.flipkart.com/apple-iphone-12-black...	Apple	75900	84900	10	2101	180	MOBFWBYZK3HACR72	4.6	6 GB

	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Upc	Star Rating	Ram
36	APPLE iPhone 12 (Blue, 128 GB)	https://www.flipkart.com/apple-iphone-12-blue-...	Apple	75900	84900		10	2101	180	MOBFWBYZKPTZF9VG	4.6 6 GB
37	APPLE iPhone 12 Pro Max (Silver, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	120900	129900		6	580	45	MOBFWBYZNSNVGGZC	4.6 6 GB
38	APPLE iPhone 12 Mini (Red, 64 GB)	https://www.flipkart.com/apple-iphone-12-mini-...	Apple	59900	69900		14	740	64	MOBFWBYZNVWGW2U	4.5 6 GB
39	APPLE iPhone 12 Pro Max (Gold, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	120900	129900		6	580	45	MOBFWBYZQVKT77YH	4.6 6 GB
40	APPLE iPhone 12 (Green, 128 GB)	https://www.flipkart.com/apple-iphone-12-green...	Apple	75900	84900		10	2092	178	MOBFWBYZQXUEHF48	4.6 6 GB
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
42	APPLE iPhone 12 (White, 64 GB)	https://www.flipkart.com/apple-iphone-12-white...	Apple	70900	79900		11	2101	180	MOBFWBYZTK33MBG9	4.6 6 GB
43	APPLE iPhone 12 (Black, 64 GB)	https://www.flipkart.com/apple-iphone-12-black...	Apple	70900	79900		11	2092	178	MOBFWBYZU5FWK2VP	4.6 6 GB
44	APPLE iPhone 12 (Red, 128 GB)	https://www.flipkart.com/apple-iphone-12-red-1...	Apple	75900	84900		10	2101	180	MOBFWBYZUHPFWQRD	4.6 6 GB
45	APPLE iPhone 12 Mini (Black, 64 GB)	https://www.flipkart.com/apple-iphone-12-mini-...	Apple	59900	69900		14	740	64	MOBFWBYZXSEGBS6F	4.5 4 GB
46	APPLE iPhone 12 Pro (Pacific Blue, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-p...	Apple	110900	119900		7	545	42	MOBFWBYZXYSCEEEH	4.5 6 GB
47	APPLE iPhone 12 Pro Max (Pacific Blue, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	120900	129900		6	580	45	MOBFWBYZZABKHZQA	4.6 6 GB
48	APPLE iPhone 12 Pro Max (Silver, 256 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	130900	139900		6	580	45	MOBFWBYZZH4AM8FE	4.6 6 GB
49	APPLE iPhone 12 Pro Max (Gold, 256 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	130900	139900		6	580	45	MOBFWBYZZPW8JHQF	4.6 6 GB
50	APPLE iPhone 11 (White, 128 GB)	https://www.flipkart.com/apple-iphone-11-white...	Apple	54999	59900		8	43707	3357	MOBFWQ6B7KKRXDDS	4.6 4 GB
51	APPLE iPhone 11 (Red, 128 GB)	https://www.flipkart.com/apple-iphone-11-red-1...	Apple	54999	59900		8	43707	3357	MOBFWQ6BEZTNK59G	4.6 4 GB
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
53	APPLE iPhone SE (Black, 128 GB)	https://www.flipkart.com/apple-iphone-se-black...	Apple	34999	44900		22	95909	8161	MOBFWQ6BHUEVZPXD	4.5 2 GB
54	APPLE iPhone SE (White, 128 GB)	https://www.flipkart.com/apple-iphone-se-white...	Apple	34999	44900		22	95807	8154	MOBFWQ6BJEHMUUZY	4.5 2 GB
55	APPLE iPhone SE (Red, 128 GB)	https://www.flipkart.com/apple-iphone-se-red-1...	Apple	34999	44900		22	95909	8161	MOBFWQ6BJTVFKPEJ	4.5 2 GB
56	APPLE iPhone 11 (Black, 128 GB)	https://www.flipkart.com/apple-iphone-11-black...	Apple	54999	59900		8	43470	3331	MOBFWQ6BKRYBP5X8	4.6 4 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	MOBFWQ6BTFFJKGKE	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	MOBFWQ6BVVVEH3XE	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

In [8]: df.isnull().sum()

Out[8]: Product Name 0
Product URL 0
Brand 0
Sale Price 0
Mrp 0
Discount Percentage 0
Number Of Ratings 0
Number Of Reviews 0
Upc 0
Star Rating 0
Ram 0
dtype: int64

In [9]:

```
# check the descriptive statistics of the data

df.describe()
```

Out[9]:

	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Star Rating
count	62.000000	62.000000	62.000000	62.000000	62.000000	62.000000
mean	80073.887097	88058.064516	9.951613	22420.403226	1861.677419	4.575806
std	34310.446132	34728.825597	7.608079	33768.589550	2855.883830	0.059190
min	29999.000000	39900.000000	0.000000	542.000000	42.000000	4.500000
25%	49900.000000	54900.000000	6.000000	740.000000	64.000000	4.500000
50%	75900.000000	79900.000000	10.000000	2101.000000	180.000000	4.600000
75%	117100.000000	120950.000000	14.000000	43470.000000	3331.000000	4.600000
max	140900.000000	149900.000000	29.000000	95909.000000	8161.000000	4.700000

In [10]:

```
# lets find out the highest rated iphones in india

top Rated = df.sort_values(by='Star Rating', ascending = False).head(10)
top Rated
```

Out[10]:

	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Upc	Star Rating	Ram
20	APPLE iPhone 11 Pro Max (Midnight Green, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117100	117100	0	1078	101	MOBFKCTSRYPQNYT	4.7	4 GB
17	APPLE iPhone 11 Pro Max (Space Grey, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117100	117100	0	1078	101	MOBFKCTSKDMKCGQS	4.7	4 GB
16	APPLE iPhone 11 Pro Max (Midnight Green, 256 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	131900	131900	0	1078	101	MOBFKCTSCAAKGQV7	4.7	4 GB
15	APPLE iPhone 11 Pro Max (Gold, 64 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	117100	117100	0	1078	101	MOBFKCTSAPAYNSGG	4.7	4 GB
14	APPLE iPhone 11 Pro Max (Gold, 256 GB)	https://www.flipkart.com/apple-iphone-11-pro-m...	Apple	131900	131900	0	1078	101	MOBFKCTS7HCHSPFH	4.7	4 GB
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
29	APPLE iPhone 12 (White, 128 GB)	https://www.flipkart.com/apple-iphone-12-white...	Apple	75900	84900	10	2101	180	MOBFWBYZBTZFGJF9	4.6	6 GB
32	APPLE iPhone 12 Pro Max (Graphite, 128 GB)	https://www.flipkart.com/apple-iphone-12-pro-m...	Apple	120900	129900	6	580	45	MOBFWBYZFDGQSDWS	4.6	6 GB
35	APPLE iPhone 12 (Black, 128 GB)	https://www.flipkart.com/apple-iphone-12-black...	Apple	75900	84900	10	2101	180	MOBFWBYZK3HACR72	4.6	6 GB
36	APPLE iPhone 12 (Blue, 128 GB)	https://www.flipkart.com/apple-iphone-12-blue-...	Apple	75900	84900	10	2101	180	MOBFWBYZKPTZF9VG	4.6	6 GB

In [11]:

```
print(top Rated['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
```

In [53]:

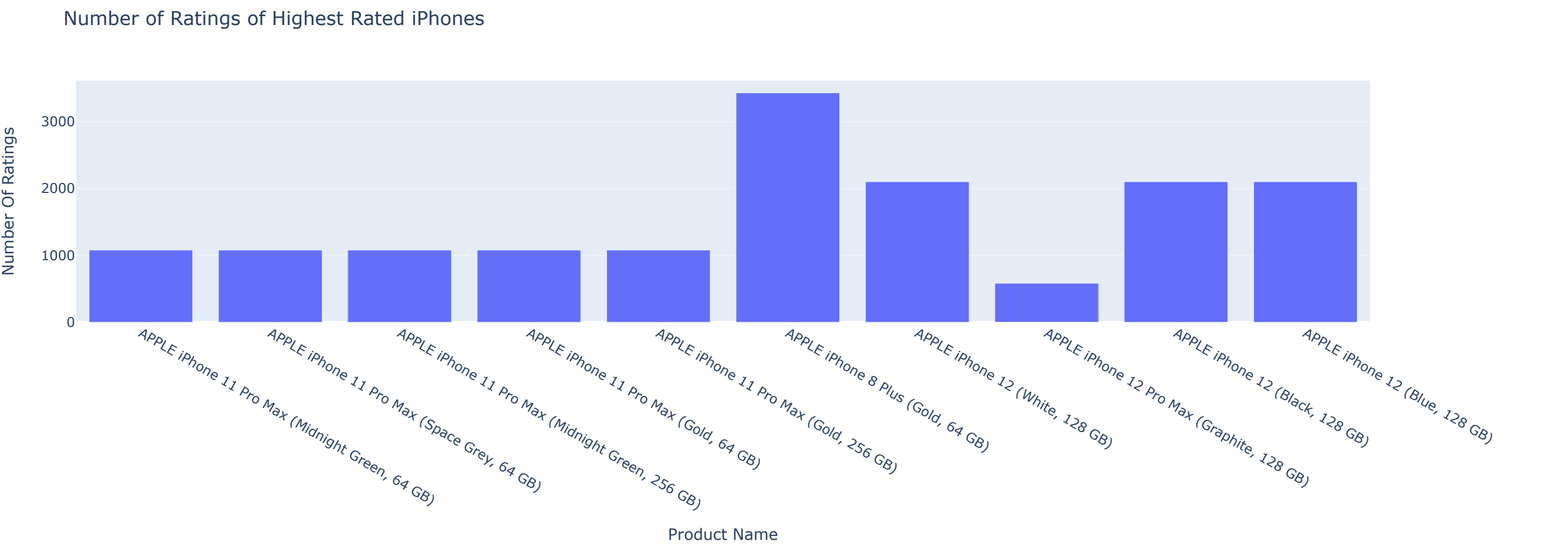
```
#iphones = top Rated['Product Name'].value_counts()
#iphones
```

```
In [54]: #label = iphones.index
#label

#count = topRated['Number Of Ratings']
#count

In [ ]: #Now let's have a look at the number of ratings of the highest-rated iPhones on Flipkart:

In [12]: figure = px.bar(topRated, x='Product Name',
                        y = 'Number Of Ratings',
                        title="Number of Ratings of Highest Rated iPhones")
figure.show()
```

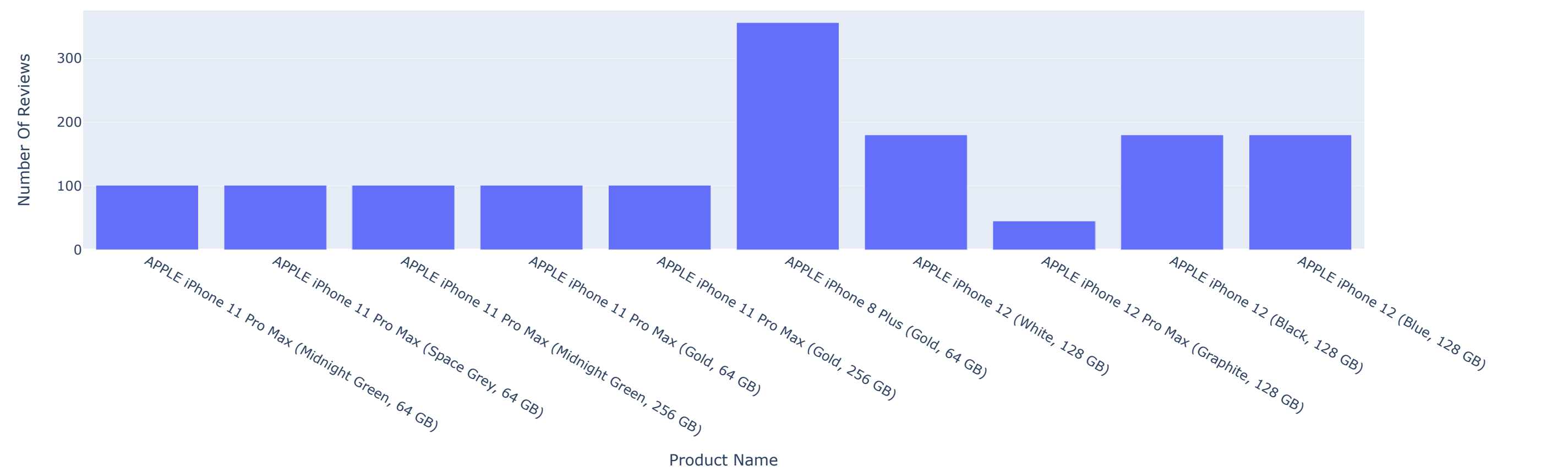


```
In [ ]: #According to the above bar graph, APPLE iPhone 8 Plus (Gold, 64 GB) has the most ratings on Flipkart

In [ ]: #Now let's have a look at the number of reviews of the highest-rated iPhones on Flipkart:

In [13]: figure = px.bar(topRated, x='Product Name',
                        y = 'Number Of Reviews',
                        title="Number of Ratings of Highest Rated iPhones")
figure.show()
```

Number of Ratings of Highest Rated iPhones

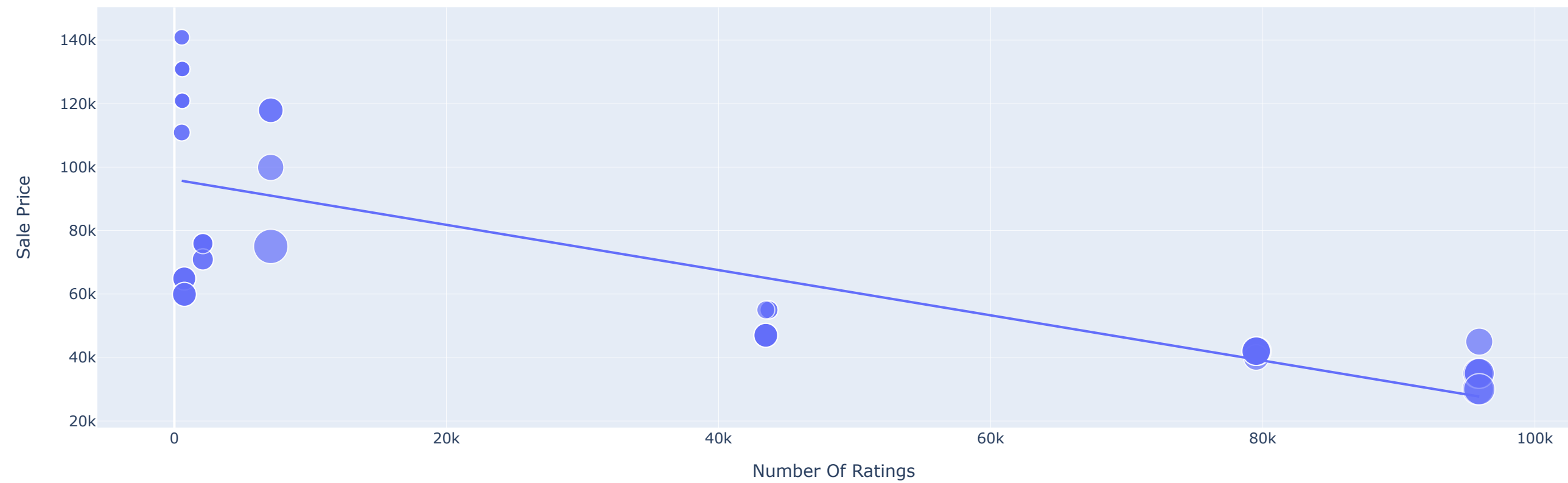


In []: *#APPLE iPhone 8 Plus (Gold, 64 GB) is also leading in the highest number of reviews on Flipkart among the highest-rated iPhones in India.*

In [14]: *#Now let's have a look at the relationship between the sale price of iPhones and their ratings on Flipkart:*

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

Relationship between Sale Price and Number of Ratings of iPhones

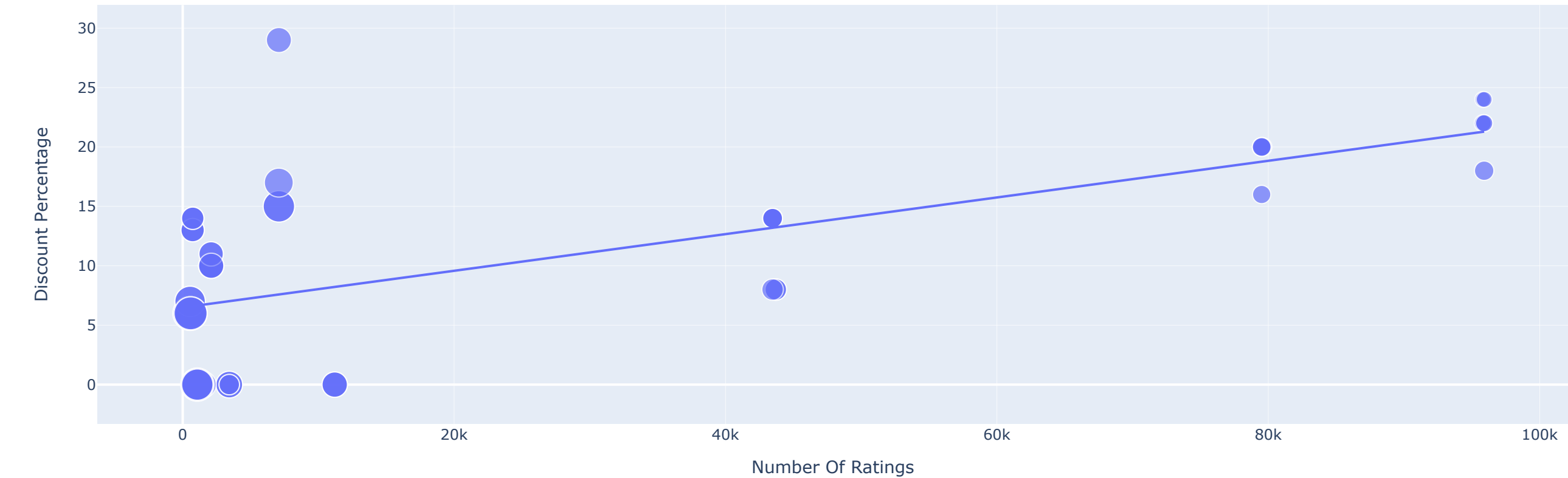


```
In [ ]: #There is a negative linear relationship between the sale price of iPhones and the number of ratings.  
#It means iPhones with lower sale prices are sold more in India.  
  
#Now let's have a look at the relationship between the discount percentage on iPhones on Flipkart and the number of ratings:
```

```
In [ ]:
```

```
In [15]: figure = px.scatter(data_frame = df, x="Number Of Ratings",  
                           y="Discount Percentage", size="Sale Price",  
                           trendline="ols",  
                           title="Relationship between Discount Percentage and Number of Ratings of iPhones")  
figure.show()
```


Relationship between Discount Percentage and Number of Ratings of iPhones



In []: *#There is a linear relationship between the discount percentage on iPhones on Flipkart and the number of ratings.
#It means iPhones with high discounts are sold more in India.*

Summary

In []: APPLE iPhone 8 Plus (Gold, 64 GB) was the most appreciated iPhone in India
iPhones with lower sale prices are sold more in India
iPhones with high discounts are sold more in India