

```
amazon.info()
```

✓ 0.0s

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1462 entries, 0 to 1461
Data columns (total 15 columns):
 #   Column                Non-Null Count  Dtype
---  -
 0   Unnamed: 0            1462 non-null   int64
 1   product_id            1462 non-null   object
 2   product_name          1462 non-null   object
 3   category              1462 non-null   object
 4   discounted_price      1462 non-null   float64
 5   actual_price          1462 non-null   float64
 6   discount_percentage   1462 non-null   float64
 7   rating                1462 non-null   float64
 8   rating_count          1462 non-null   int64
 9   user_id               1462 non-null   object
10   review_id             1462 non-null   object
11   review_title          1462 non-null   object
12   review_content_WC     1462 non-null   int64
13   title_sentiment       1462 non-null   object
14   main_sentiment        1462 non-null   object
dtypes: float64(4), int64(3), object(8)
memory usage: 171.5+ KB
```



```
amazon.nunique().to_frame(name='Count of unique values')
```

[8]

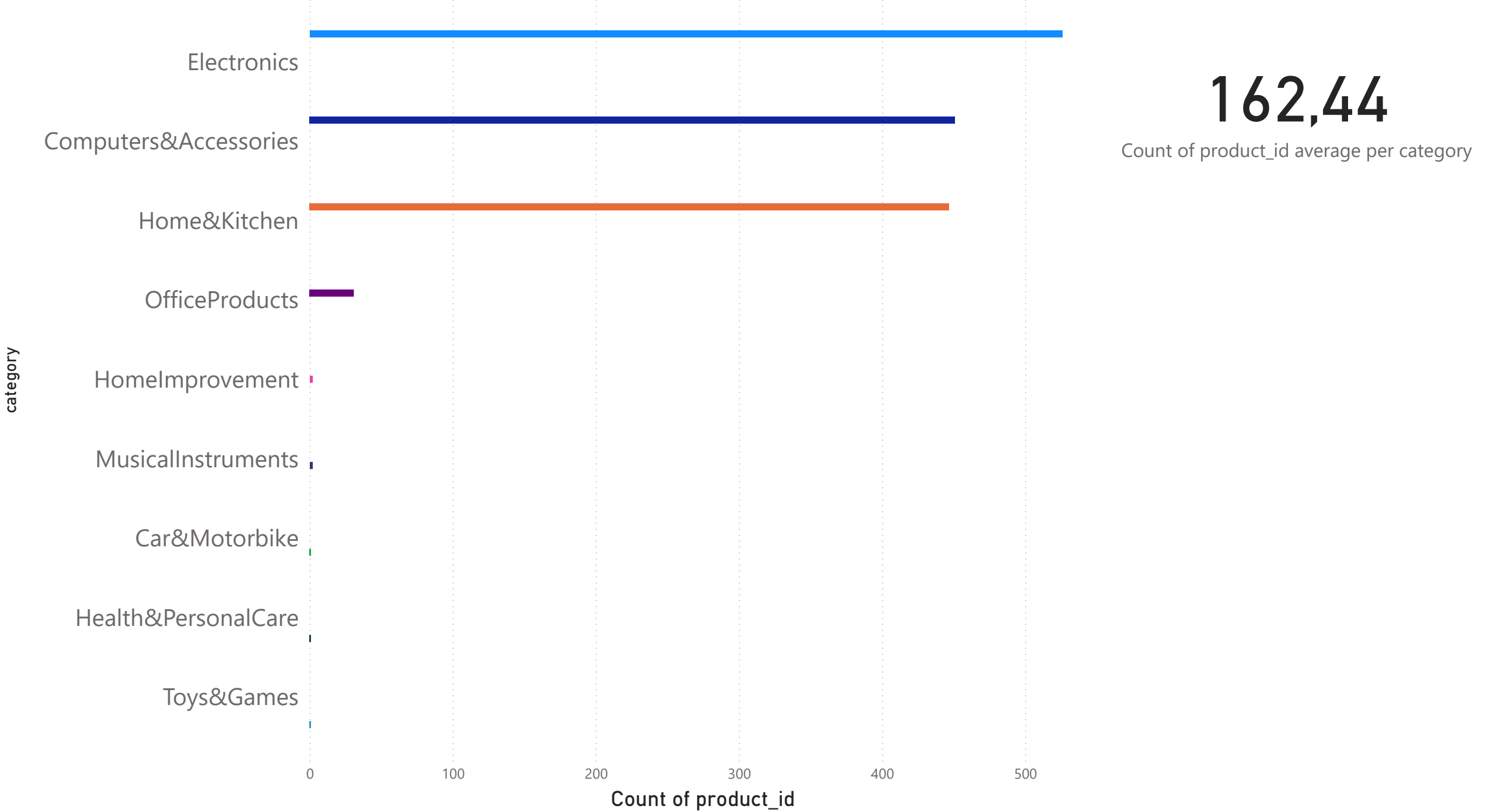
✓ 0.0s

...

Count of unique values	
Unnamed: 0	1462
product_id	1348
product_name	1334
category	9
discounted_price	550
actual_price	449
discount_percentage	92
rating	25
rating_count	1142
user_id	1191
review_id	1191
review_title	1191
review_content_WC	440
title_sentiment	2
main_sentiment	2

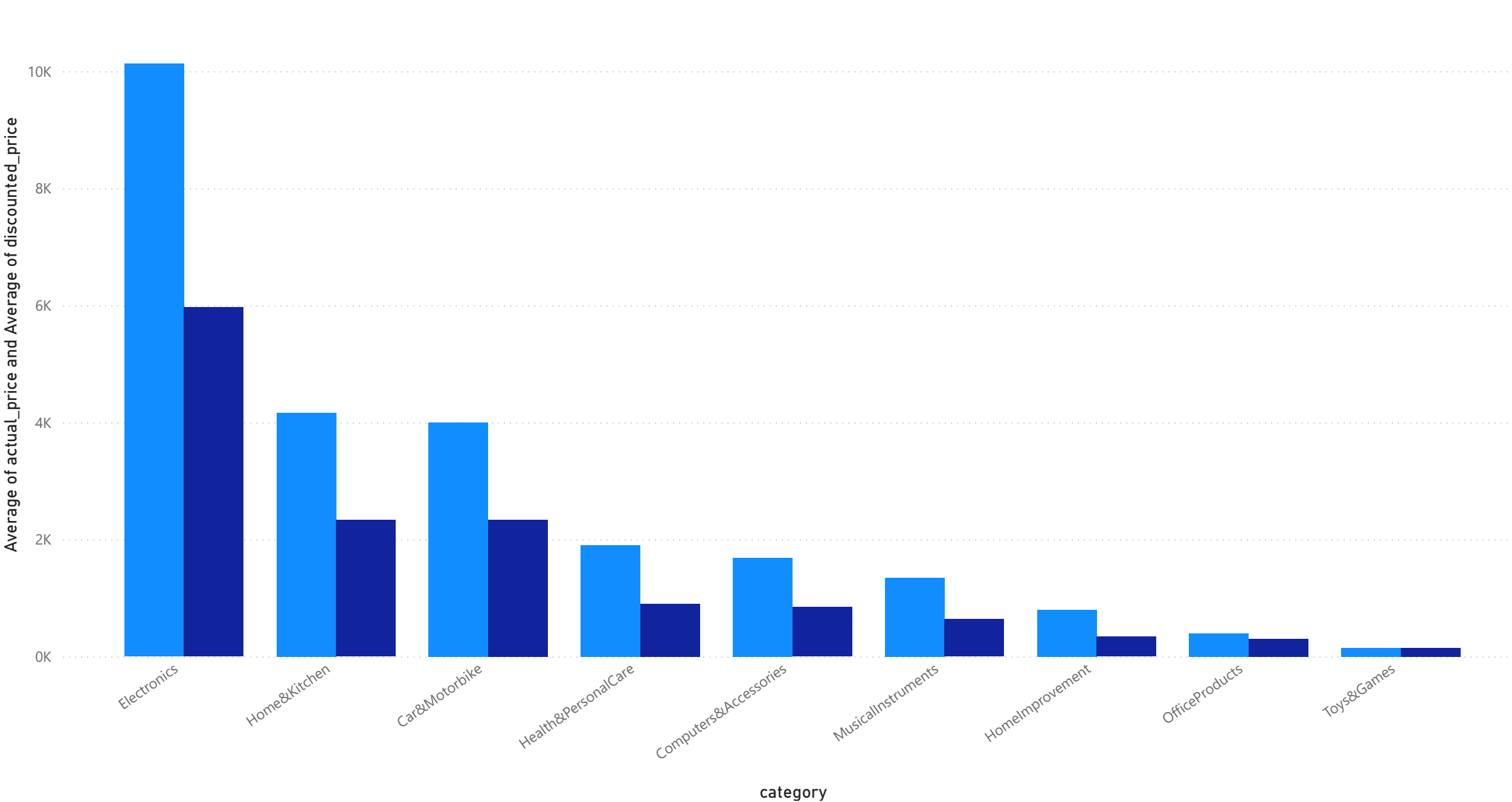
# Analiza kategorii produktów

Count of product\_id by category and category



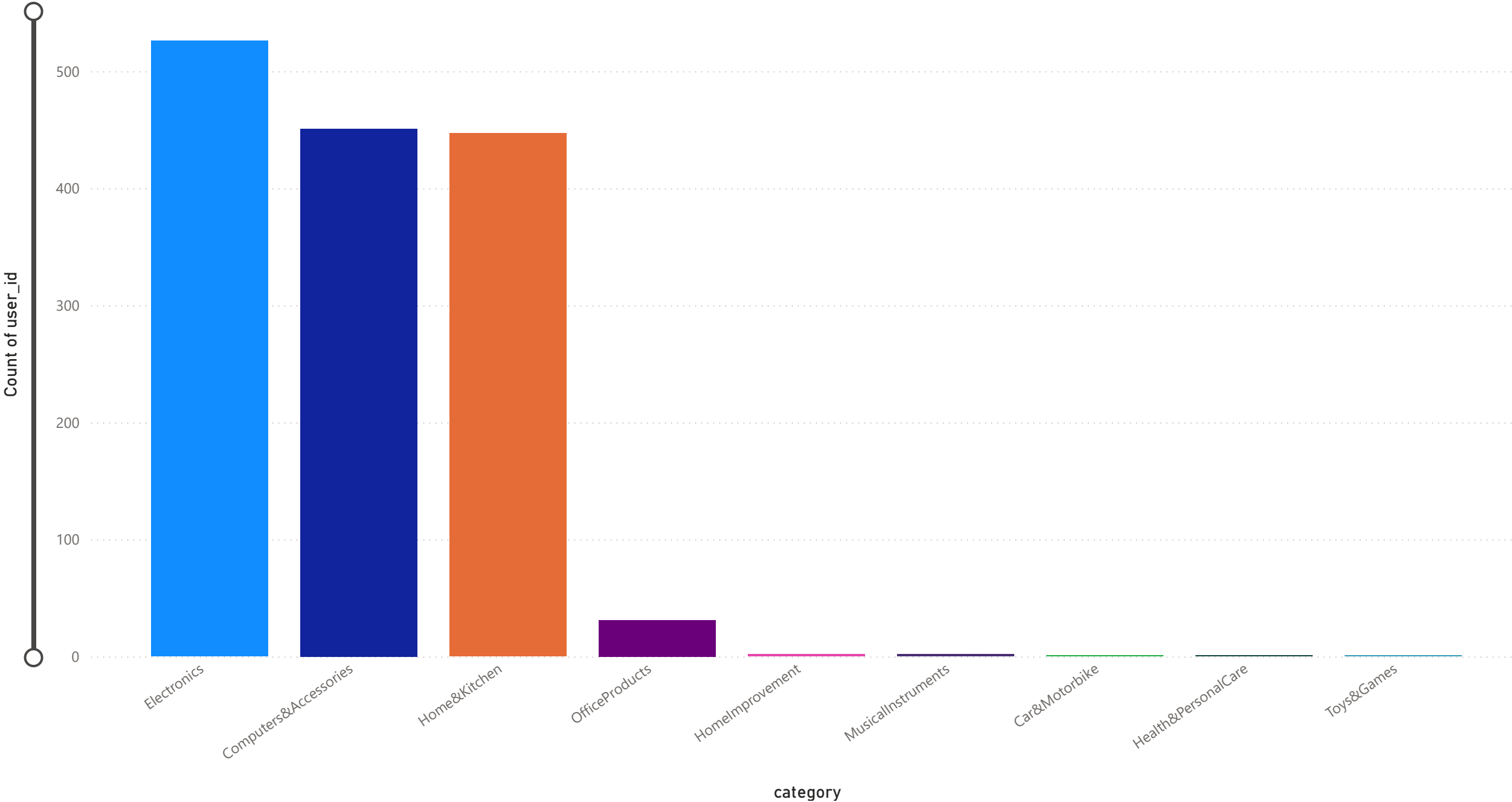
Average of actual\_price and Average of discounted\_price by category

● Average of actual\_price ● Average of discounted\_price

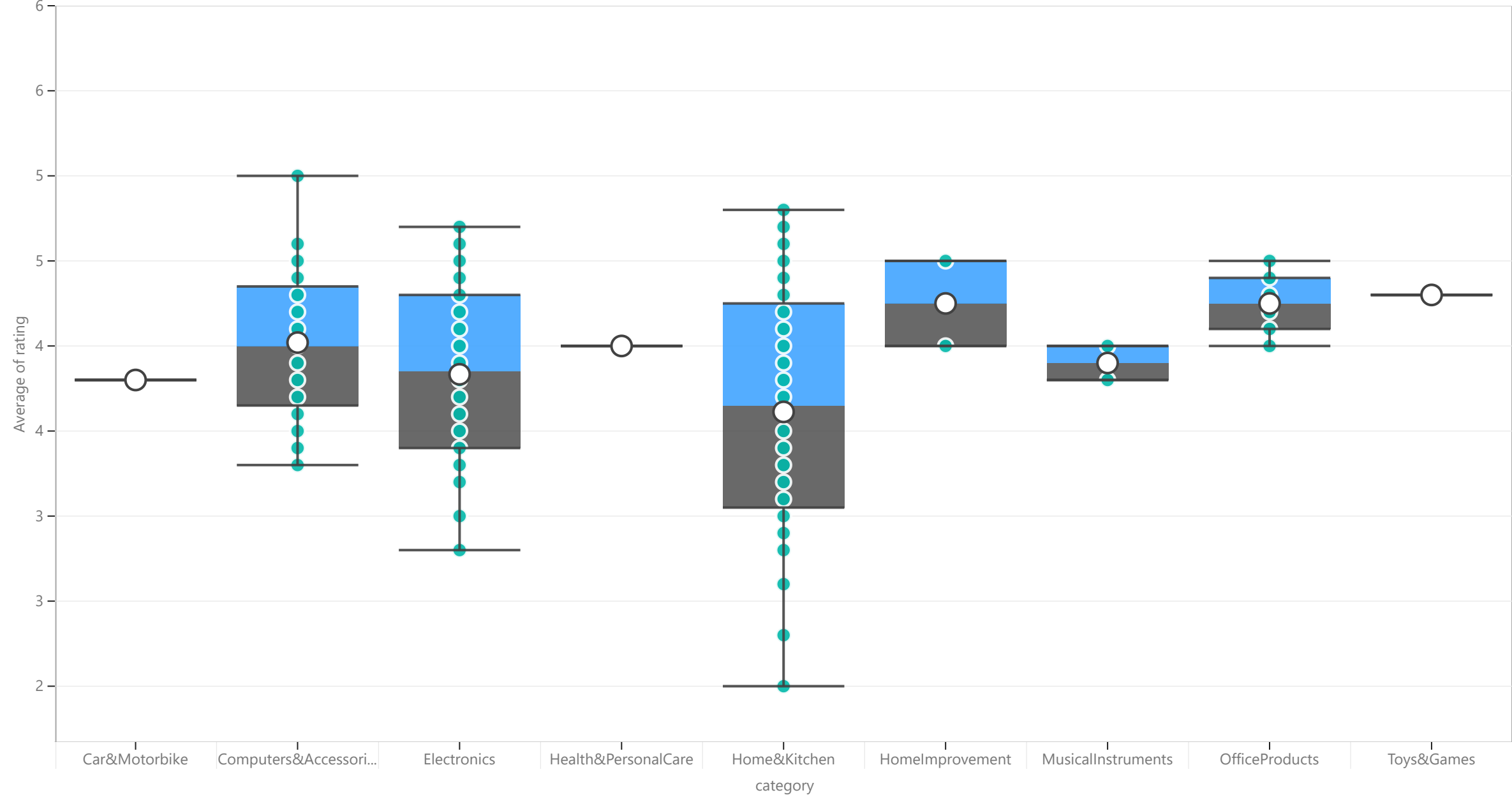


Count of user\_id by category and category

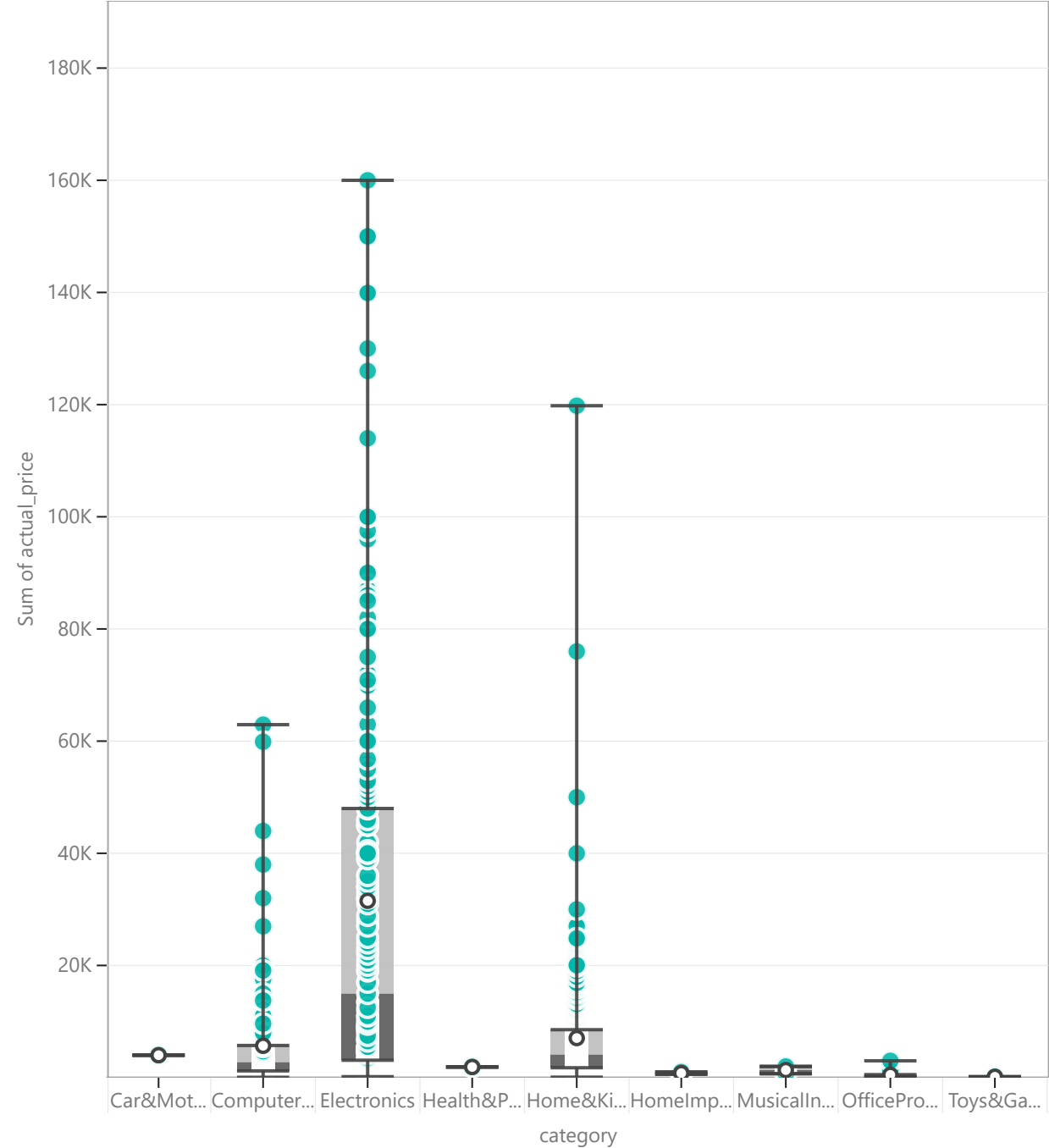
category   ● Electronics   ● Computers&Accessories   ● Home&Kitchen   ● OfficeProducts   ● HomeImprovement   ● MusicalInstruments   ● Car&Motorbike   ● Health&PersonalCare   ● Toys&Games



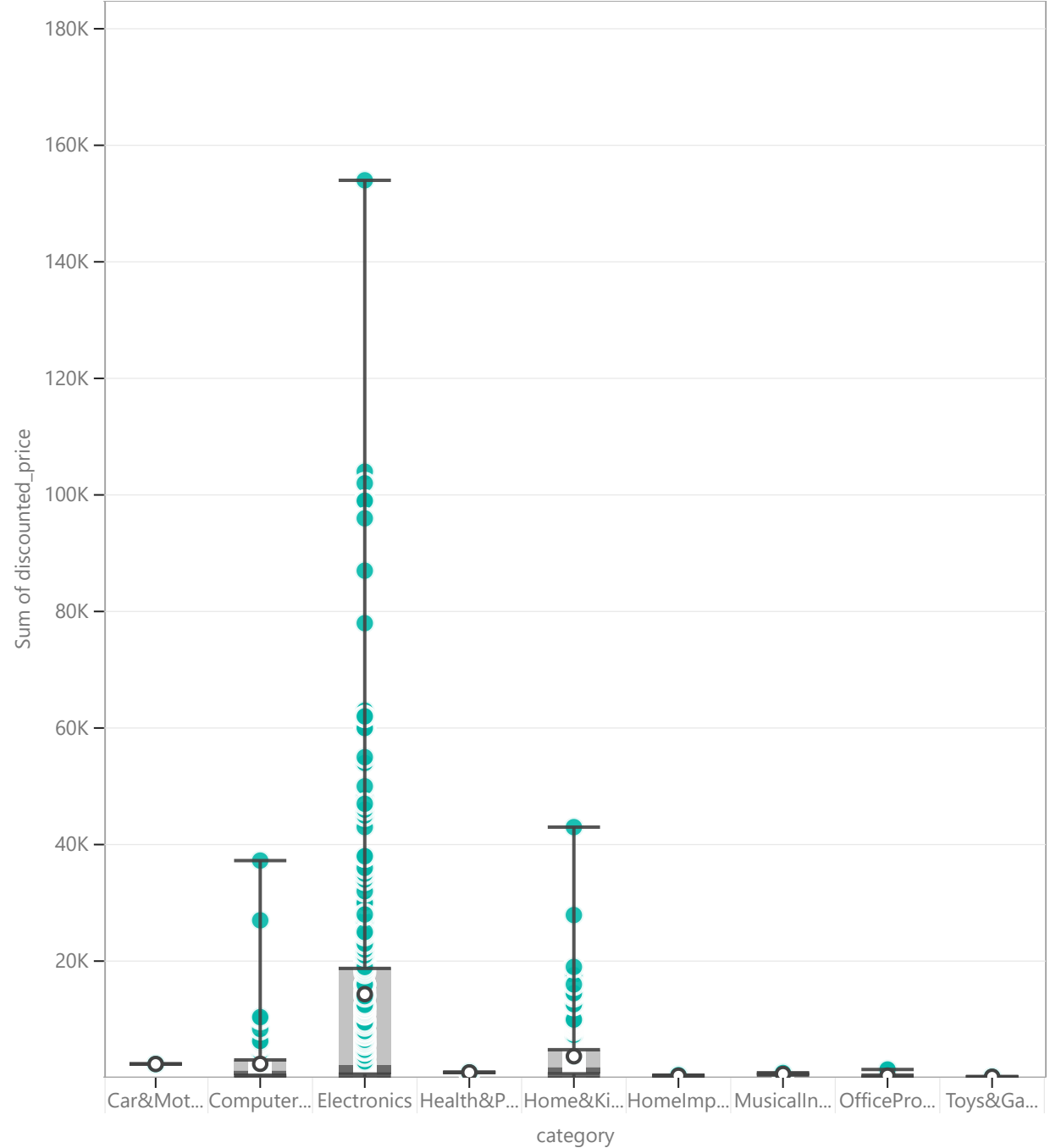
Average of rating by rating and category



Sum of actual\_price by actual\_price and category



Sum of discounted\_price by discounted\_price and category



# Analiza cen



actual_price	discounted_price
39,00	39,00
50,00	50,00
59,00	59,00
75,00	67,00
79,00	79,00
89,00	89,00
99,00	89,00
99,00	99,00
100,00	90,00
100,00	100,00
120,00	114,00
120,00	120,00
149,00	149,00
150,00	150,00
160,00	137,00
160,00	157,00
165,00	130,00
165,00	165,00
171,00	99,00
175,00	90,00
180,00	125,00
180,00	149,00
180,00	159,00
199,00	57,89
199,00	59,00
199,00	85,00
199,00	177,00
200,00	116,00
210,00	178,00
220,00	190,00
225,00	191,00
225,00	225,00
225,00	225,00

4,58M

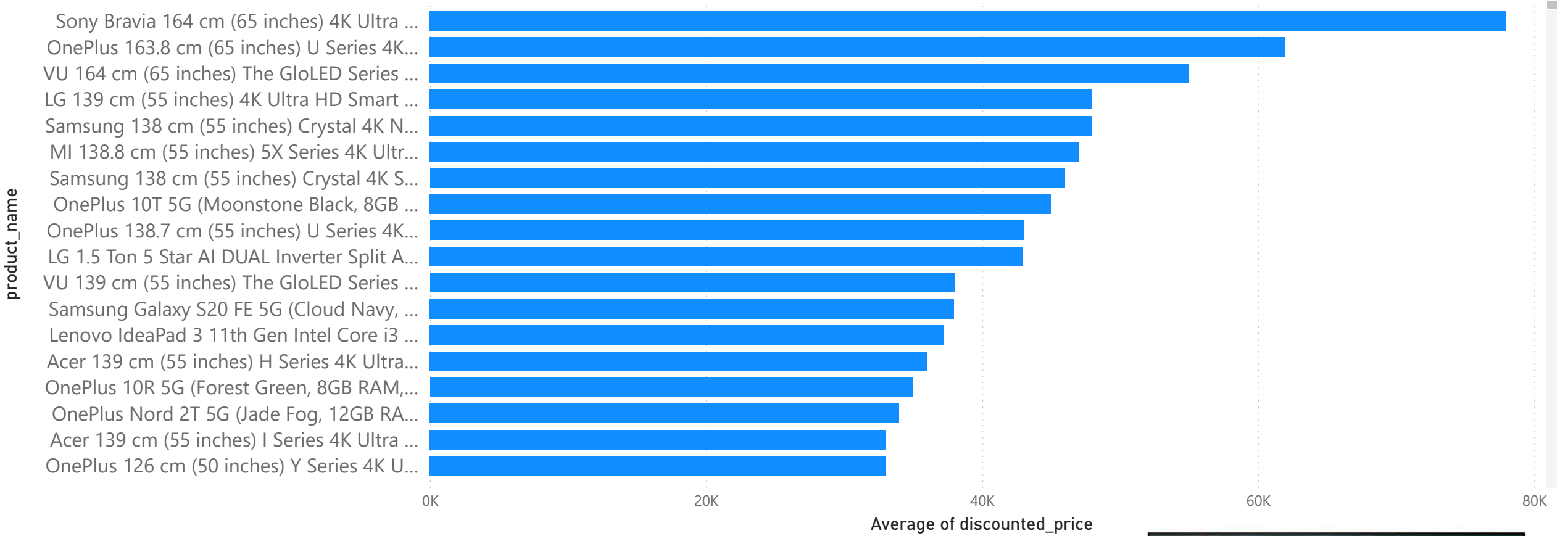
Sum of discounted\_price

7,97M

Sum of actual\_price

Cena po obniżce jest o 42.75%  
mniejsza niż cena przed obniżką.

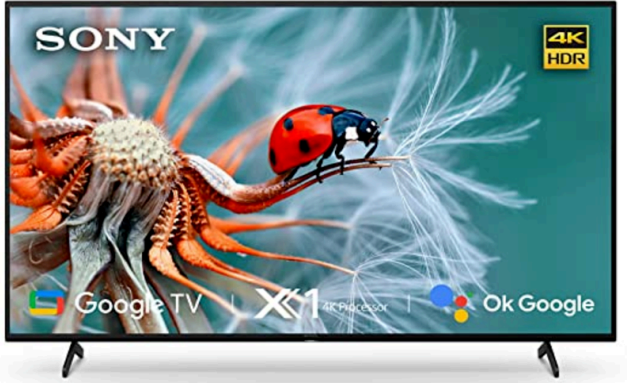
Average of discounted\_price by product\_name



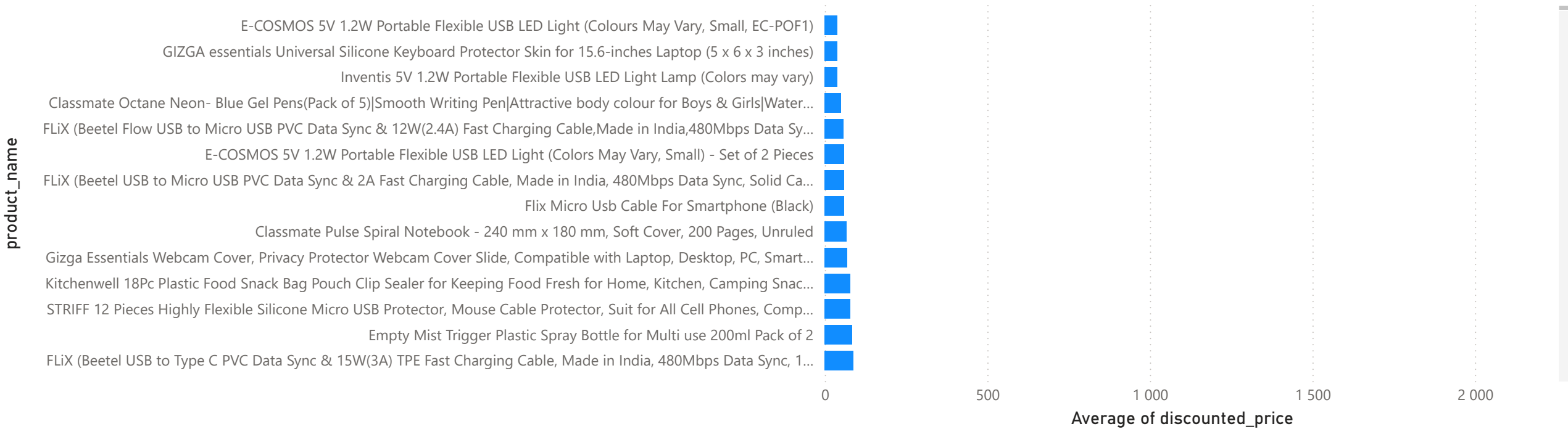
77,99K

Max of discounted\_price

Sony Bravia 164 cm (65 inches) 4K Ultra  
HD Smart LED Google TV KD-65X74K  
(Black)



Average of discounted\_price by product\_name



39,00

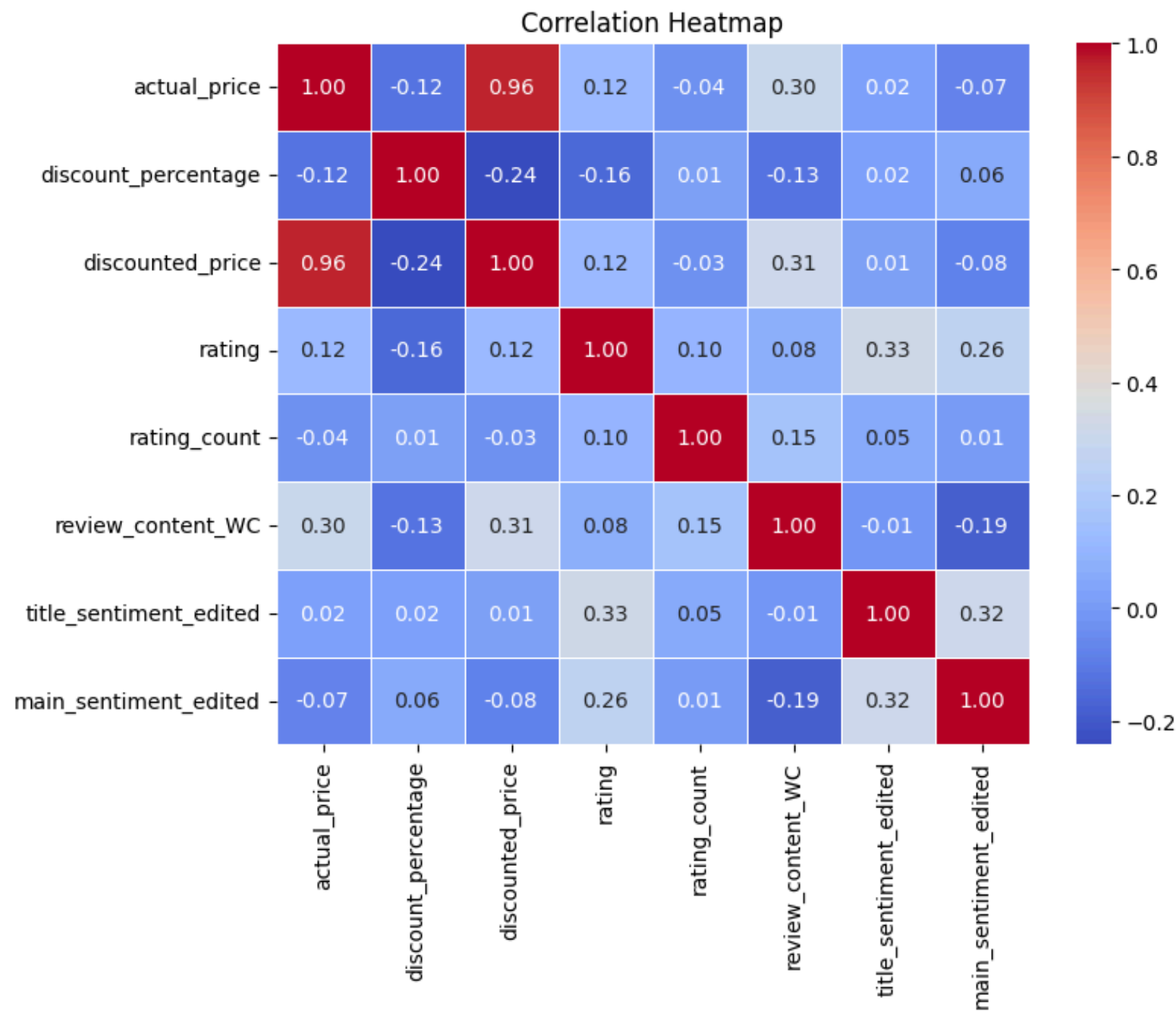
Min of discounted\_price

E-COSMOS 5V 1.2W Portable Flexible  
USB LED Light (Colours May Vary,  
Small, EC-POF1

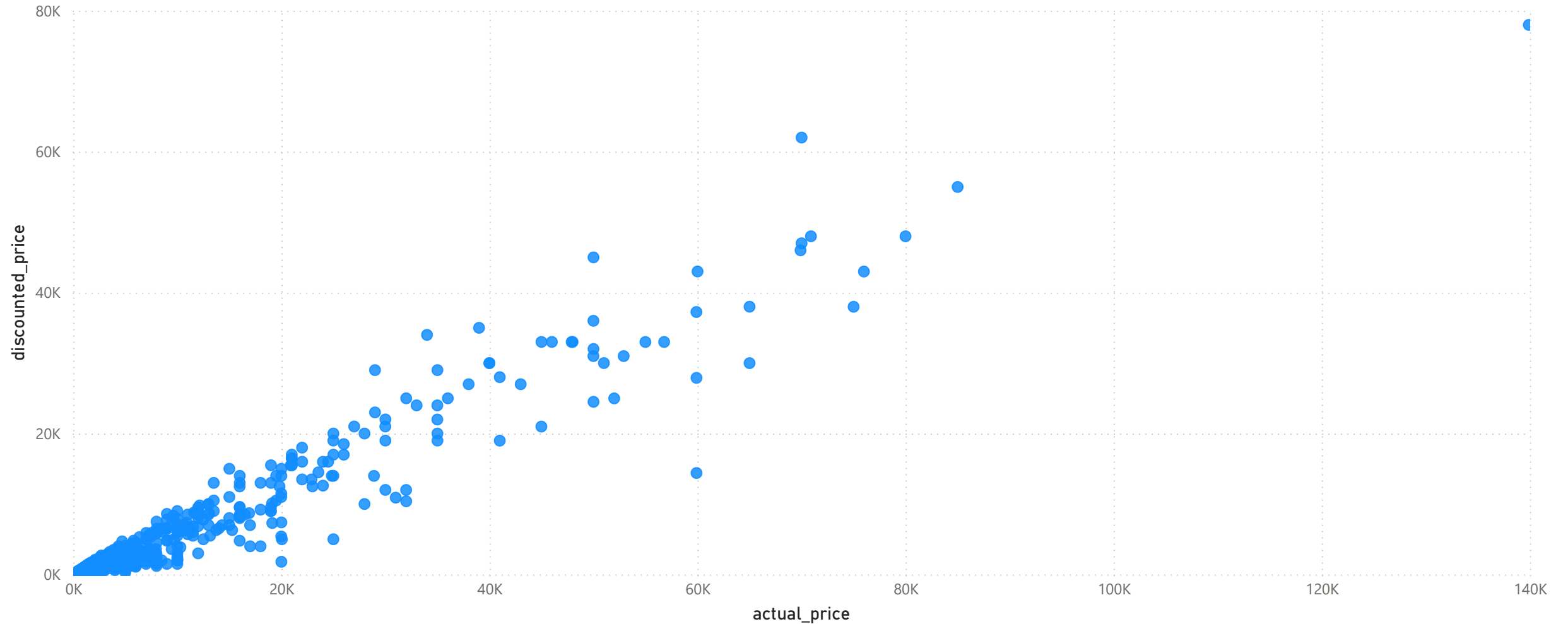


amazon.in

E-COSMOS 5V 1.2W  
Portable Flexible USB  
LED Light Lamp (Colors  
May Vary)



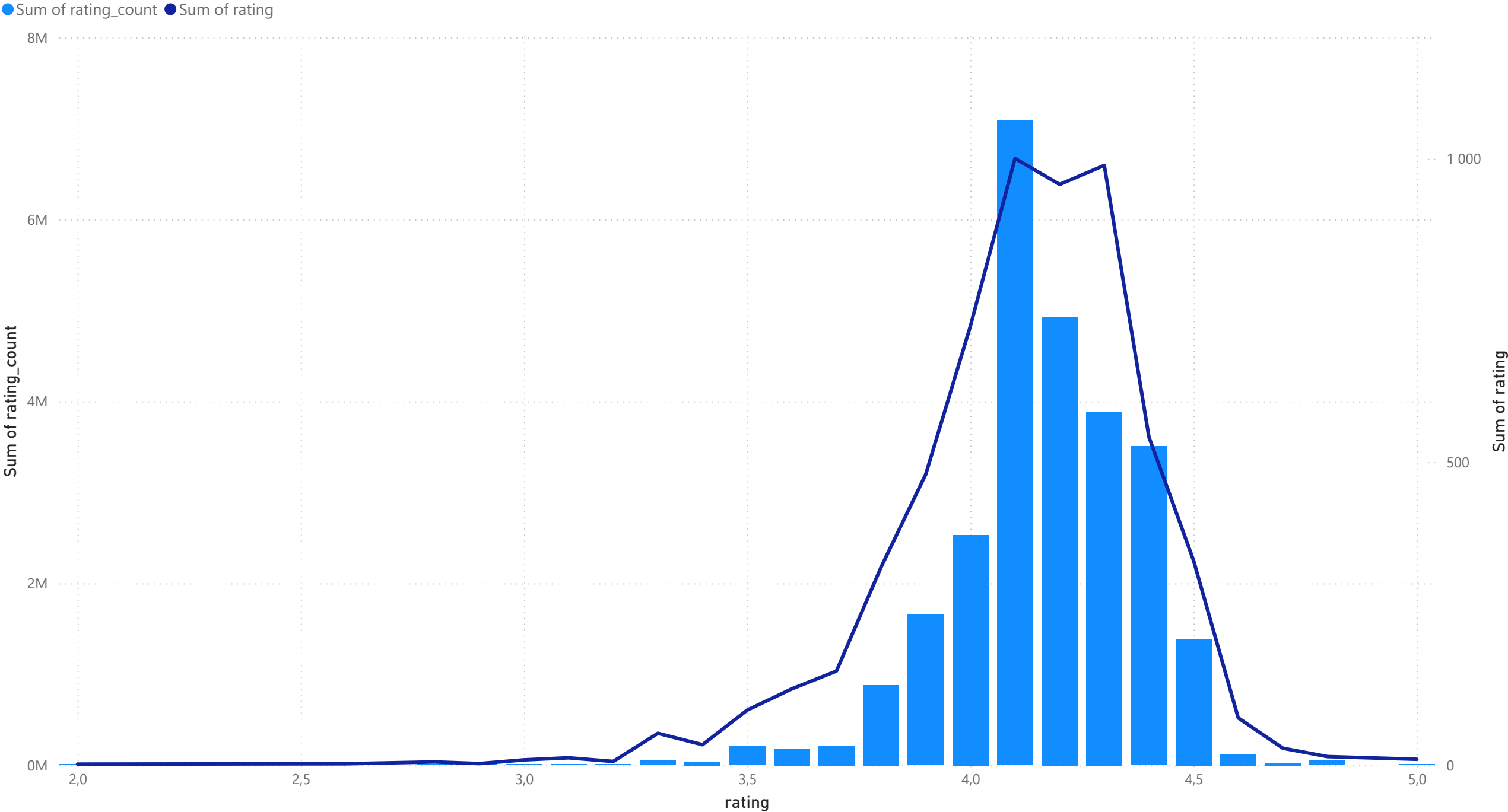
actual\_price and discounted\_price



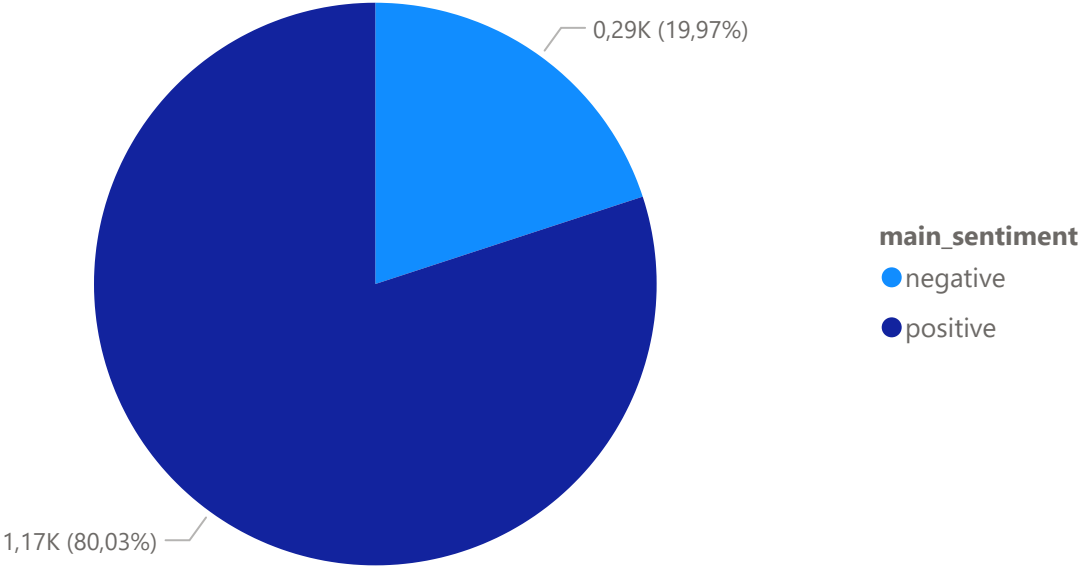
W zbiorze danych prawie nie ma korelacji między cechami. Tylko rzeczywiste ceny produktów i ceny po rabacie mają dodatnią korelację.

# Analiza opinii użytkowników

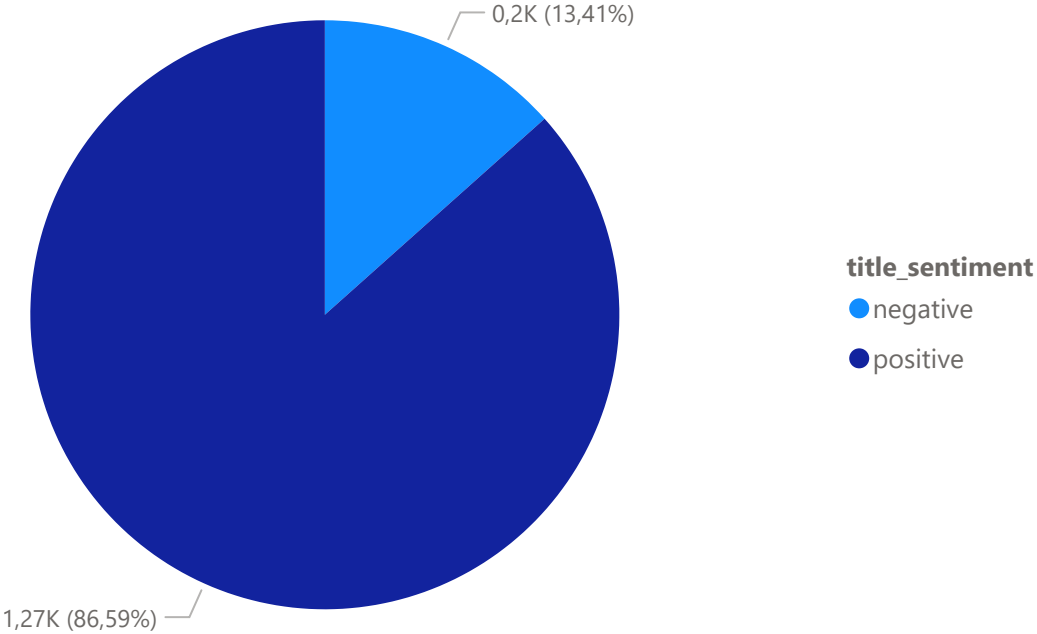
Sum of rating\_count and Sum of rating by rating



Count of main\_sentiment by main\_sentiment



Count of title\_sentiment by title\_sentiment





Count of review\_id

1,191K

Positive Comments

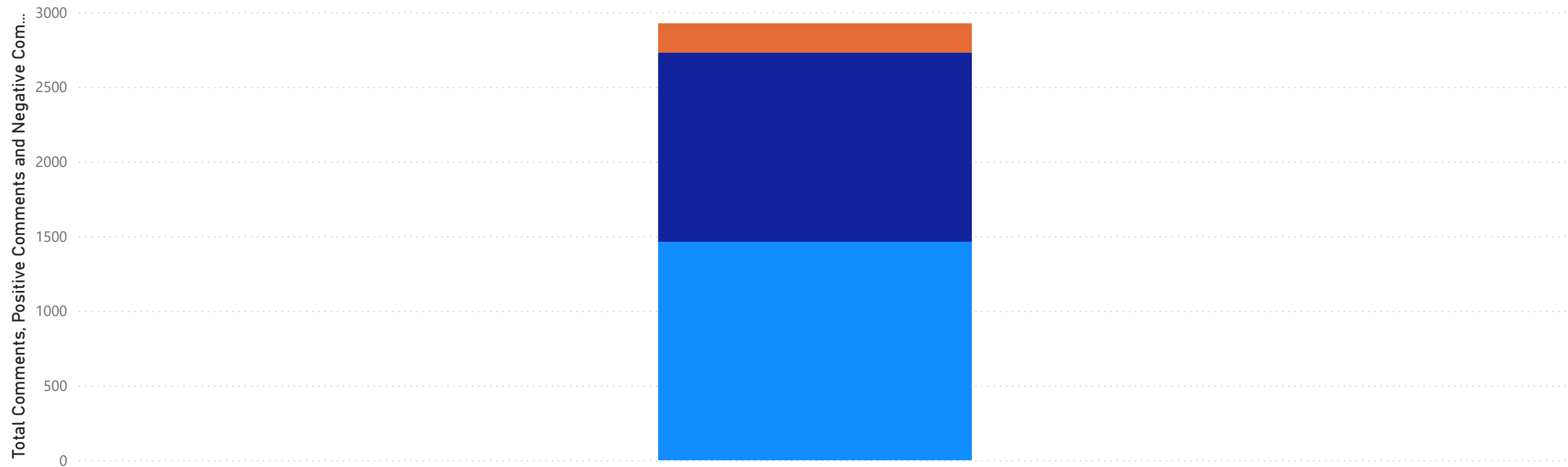
1K

Negative Comments

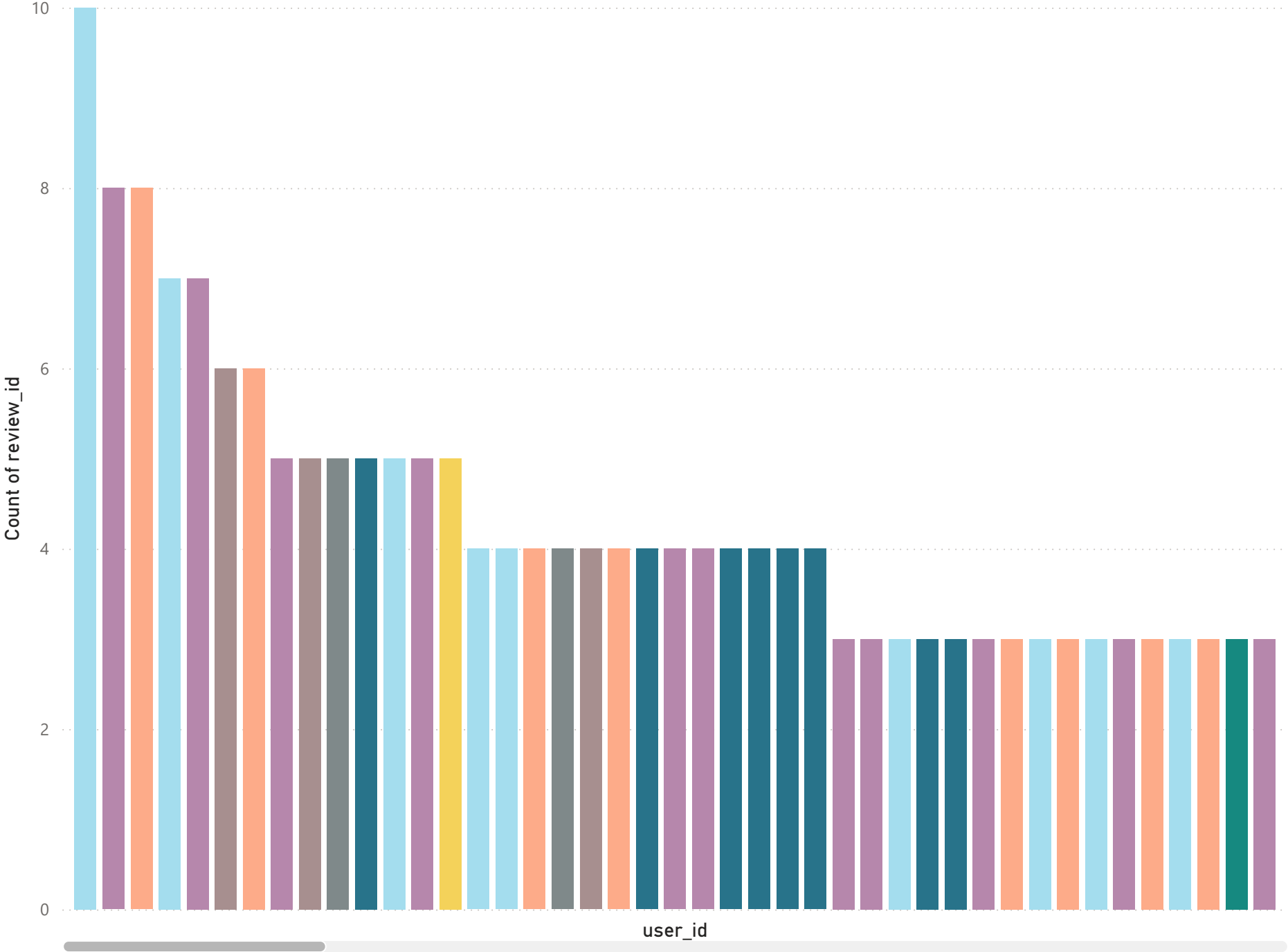
196

Total Comments, Positive Comments and Negative Comments

● Total Comments ● Positive Comments ● Negative Comments



Count of review\_id by user\_id and rating



Count of review\_id

1,191K

Count of review\_id average per user\_id

1,23