

In [1]:

```
import requests
from bs4 import BeautifulSoup
```

In [2]:

```
mainurl = 'https://www.sulpak.kz'
headers = {'User-Agent' : 'Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KH
```

In [3]:

```
productlinks = []
```

In [4]:

```
for x in range(1, 13):
    r = requests.get(f'https://www.sulpak.kz/f/noutbuki/taraz?page={x}')
    soup = BeautifulSoup(r.content, 'lxml')
    productlist = soup.find_all('div', class_='goods-tiles')
    for product in productlist:
        for link in product.find_all('a', href = True):
            productlinks.append(mainurl + link['href'])
            productlinks = set(productlinks)
            productlinks = [ x for x in productlinks if "#commentsTab" not in x ]
```

In [5]:

```
print(len(productlinks))
```

341

In [6]:

```
for x in productlinks:
    print(x)
```

```
https://www.sulpak.kz/g/ultrabuk_apple_macbook_12_mrqn2_62_1530 (https://w
ww.sulpak.kz/g/ultrabuk_apple_macbook_12_mrqn2_62_1530)
https://www.sulpak.kz/g/noutbuk_apple_macbook_pro_13_m1_3_28gb512gb_ssd_sp
ace_gray_myd92_62_2074 (https://www.sulpak.kz/g/noutbuk_apple_macbook_pro_
13_m1_3_28gb512gb_ssd_space_gray_myd92_62_2074)
https://www.sulpak.kz/g/noutbuk_acer_aspire_3_a315_55_nx_heher_01g_62_1722
(https://www.sulpak.kz/g/noutbuk_acer_aspire_3_a315_55_nx_heher_01g_62_172
2)
https://www.sulpak.kz/g/noutbuk_acer_aspire_5_a515_54g_767q_i781t1smn_silv
er_nx_hn5er_004_62_1932 (https://www.sulpak.kz/g/noutbuk_acer_aspire_5_a51
5_54g_767q_i781t1smn_silver_nx_hn5er_004_62_1932)
https://www.sulpak.kz/g/noutbuk_lenovo_ideapad_s145_i341tuw_lenpn4_62_1914
(https://www.sulpak.kz/g/noutbuk_lenovo_ideapad_s145_i341tuw_lenpn4_62_191
4)
https://www.sulpak.kz/g/noutbuk__nitro_5_an515_44_r67f_r585gn_nh_q9ger_008
_62_1883 (https://www.sulpak.kz/g/noutbuk__nitro_5_an515_44_r67f_r585gn_nh
_q9ger_008_62_1883)
https://www.sulpak.kz/g/ultrabuk_apple_macbook_pro_13_touch_bar_silver_mv9
a2rua_62_1531 (https://www.sulpak.kz/g/ultrabuk_apple_macbook_pro_13_touch
a2rua_62_1531)
```

In [50]:

```
#testlink = 'https://www.sulpak.kz/g/noutbuk_acer_aspire_3_a315_34_c41tuw_nx_he3er_011_62_1'
laptoplist = []
for link in productlinks:
    r = requests.get(link, headers = headers)
    soup = BeautifulSoup(r.content, 'lxml')
    name = soup.find('h1', class_='product-container-title').text.strip()
    try:
        price = soup.find('span', class_='sum').text.strip()
    except:
        price = 'Sold Out'
    try:
        review = soup.find('div', class_='rating-container').text.strip()
    except:
        review = 'No Reviews'
    try:
        rating = soup.find('div', class_='rating-container')
        rating = str(rating)
        star = rating.count('fa fa-star active')
    except:
        star = 'No Ratings'

    laptop = {
        'Name' : name,
        'Price' : price,
        'Reviews' : review,
        'Rating out of 5' : star
    }

    laptoplist.append(laptop)
```

In [11]:

```
import pandas as pd
```

In [51]:

```
df = pd.DataFrame(laptoplist)
df
```

Out[51]:

| | Name | Price | Reviews | Rating out of 5 |
|-----|---|------------|-----------|-----------------|
| 0 | Ультрабук Apple MacBook 12" Core M3/8GB/256GB ... | 383 790 тг | 2 отзыва | 5 |
| 1 | Ноутбук Apple MacBook Pro 13" M1 3.2/8Gb/512GB... | 825 990 тг | 0 отзывов | 0 |
| 2 | Ноутбук Acer Aspire 3 A315-55 (NX.HEHER.01G) | 189 990 тг | 1 отзыв | 1 |
| 3 | Ноутбук Acer Aspire 5 A515-54G-767Q Silver (NX... | 349 990 тг | 0 отзывов | 0 |
| 4 | Ноутбук Lenovo IdeaPad S145 I341TUW (81W800KNRK) | 219 990 тг | 0 отзывов | 0 |
| ... | ... | ... | ... | ... |
| 336 | Ультрабук Acer Swift 1 SF114-32 (NX.GXUER.00E) | 184 990 тг | 0 отзывов | 0 |
| 337 | Ноутбук Acer Predator Helios 300 PH317-54-76VC... | 979 990 тг | 0 отзывов | 0 |
| 338 | Ноутбук Asus VivoBook 15 X512D R341TUW (90NB0L... | 149 990 тг | 0 отзывов | 0 |
| 339 | Ноутбук ASUS Laptop 15 M509D R381TUN (90NB0P51... | 179 990 тг | 0 отзывов | 0 |
| 340 | Ноутбук Asus Rog Strix G512L (90NR0351-M04890) | 599 990 тг | 0 отзывов | 0 |

341 rows × 4 columns

In [53]:

```
isSold = df['Price']=='Sold Out'
```

In [54]:

```
newdf = df[isSold]
newdf
```

Out[54]:

| | Name | Price | Reviews | Rating out of 5 |
|-----|--|----------|-----------|-----------------|
| 8 | Ноутбук Asus ROG Strix Scar 17 G733QS (90NR059... | Sold Out | 0 отзывов | 0 |
| 27 | Ноутбук Asus TUF Gaming FX506LU (90NR0421-M01340) | Sold Out | 0 отзывов | 0 |
| 41 | Ноутбук Asus TUF Gaming FX505D (90NR02D2-M13710) | Sold Out | 0 отзывов | 0 |
| 73 | Ноутбук Asus VivoBook 15 AU X512J i385UN (90NB... | Sold Out | 0 отзывов | 0 |
| 75 | Ноутбук Asus Laptop s 15 D509D (90NB0P51-M20780) | Sold Out | 0 отзывов | 0 |
| 100 | Ноутбук Acer Swift 3 SF314-57 (NX.HHXER.003) | Sold Out | 0 отзывов | 0 |
| 129 | Ноутбук Acer Aspire 3 A315-22 A441TUN (NX.HE8E... | Sold Out | 0 отзывов | 0 |
| 140 | Ноутбук Acer Extensa 15 EX215-52-36GF (NX.EG8E... | Sold Out | 0 отзывов | 0 |
| 144 | Ультрабук Asus Zenbook UX435EA (I585SUW M00060) | Sold Out | 0 отзывов | 0 |
| 156 | Ноутбук Asus VivoBook 15 X512J (90NB0QU2-M05430) | Sold Out | 0 отзывов | 0 |
| 170 | Ноутбук Acer TravelMate TMB118-M-C6JP C46SUW (...) | Sold Out | 0 отзывов | 0 |
| 189 | Ноутбук Acer Swift 5 SF514-54G (NX.HU4ER.001) | Sold Out | 0 отзывов | 0 |
| 195 | Ноутбук Asus VivoBook 15 X512DA-BQ559 (90NB0LZ... | Sold Out | 0 отзывов | 0 |
| 203 | Ноутбук Asus ROG Zephyrus GA401I (90NR03F6-M10... | Sold Out | 0 отзывов | 0 |
| 211 | Ноутбук ASUS TUF Gaming FX506LU (90NR0421-M01330) | Sold Out | 0 отзывов | 0 |
| 214 | Ноутбук ASUS ZenBook 14 UX434F (90NB0MQ5-M07700) | Sold Out | 0 отзывов | 0 |
| 219 | Ноутбук Asus E410M P41TUW (90NB0Q11-M09990) | Sold Out | 0 отзывов | 0 |
| 232 | Ноутбук Asus ROG Zephyrus G14 GA401IV (90NR03F... | Sold Out | 0 отзывов | 0 |
| 271 | Ноутбук Asus VivoBook X420F i545UN (90NB0K01-M... | Sold Out | 0 отзывов | 0 |
| 272 | Ноутбук Acer Extensa 15 EX215-52 I585SUN (NX.E... | Sold Out | 0 отзывов | 0 |
| 297 | Ноутбук Acer Swift 3 SF314-57 (NX.HJFER.00B) | Sold Out | 0 отзывов | 0 |

In [27]:

```
len(newdf)
```

Out[27]:

21

In [56]:

```
notzero = df['Rating out of 5']!=0
```

In [57]:

```
ratings = df[notzero]
```

In [60]:

```
ratings.sort_values(by = ['Rating out of 5'])
```

Out[60]:

| | Name | Price | Reviews | Rating out of 5 |
|-----|---|-----------------|--------------|-----------------|
| 2 | Ноутбук Acer Aspire 3 A315-55 (NX.HEHER.01G) | 189 990 ТГ | 1 ОТЗЫВОВ | 1 |
| 248 | Ноутбук Asus TUF Gaming FX506LU (90NR0422-M04260) | 419 990 ТГ | 1 ОТЗЫВОВ | 2 |
| 50 | Ноутбук Acer Aspire 3 A315-54K NX.HEEER.01G | 129 990 ТГ | 3 ОТЗЫВОВ | 3 |
| 251 | Ультрабук Apple Macbook Pro 13" Touch Bar i5 2... | 999 990 ТГ | 1 ОТЗЫВОВ | 4 |
| 94 | Ультрабук Apple Macbook Air 13" i5 1,6/8Gb/256... | 529 990 ТГ | 1 ОТЗЫВОВ | 4 |
| ... | ... | ... | ... | ... |
| 96 | Ноутбук Asus Vivobook 14 X420UA-EK220T Transpa... | 219 990 ТГ | 4 ОТЗЫВОВ | 5 |
| 95 | Ноутбук Apple MacBook Air 13" i5 1.6/8Gb/256Gb... | 632 990 ТГ | 4 ОТЗЫВОВ | 5 |
| 93 | Ноутбук Acer Aspire 7 Gaming A715-75G-701Q (N... | 449 990 ТГ | 1 ОТЗЫВОВ | 5 |
| 127 | Ноутбук Lenovo Legion Y540-15IRH-PG0, Black, 8... | 449 990 ТГ | 1 ОТЗЫВОВ | 5 |
| 335 | Ноутбук Apple MacBook Pro 16" i9 2.3/16/1TB SS... | 1 510 990 ТГ | 2 ОТЗЫВОВ | 5 |

89 rows × 4 columns

In []: