In [1]: `!pip install selenium`

```
Requirement already satisfied: selenium in c:\programdata\anaconda3\lib\site-packa
ges (4.23.1)
Requirement already satisfied: urllib3[socks]<3,>=1.26 in c:\programdata\anaconda3
\lib\site-packages (from selenium) (1.26.16)
Requirement already satisfied: trio~=0.17 in c:\programdata\anaconda3\lib\site-pac
kages (from selenium) (0.26.2)
Requirement already satisfied: trio-websocket~=0.9 in c:\programdata\anaconda3\lib
\site-packages (from selenium) (0.11.1)
Requirement already satisfied: certifi>=2021.10.8 in c:\programdata\anaconda3\lib
\site-packages (from selenium) (2023.7.22)
Requirement already satisfied: typing_extensions~=4.9 in c:\programdata\anaconda3
\lib\site-packages (from selenium) (4.12.2)
Requirement already satisfied: websocket-client~=1.8 in c:\programdata\anaconda3\l
ib\site-packages (from selenium) (1.8.0)
Requirement already satisfied: attrs>=23.2.0 in c:\programdata\anaconda3\lib\site-
packages (from trio~=0.17->selenium) (24.2.0)
Requirement already satisfied: sortedcontainers in c:\programdata\anaconda3\lib\si
te-packages (from trio~=0.17->selenium) (2.4.0)
Requirement already satisfied: idna in c:\programdata\anaconda3\lib\site-packages
(from trio~=0.17->selenium) (3.4)
Requirement already satisfied: outcome in c:\programdata\anaconda3\lib\site-packag
es (from trio~=0.17->selenium) (1.3.0.post0)
Requirement already satisfied: sniffio>=1.3.0 in c:\programdata\anaconda3\lib\site
-packages (from trio~=0.17->selenium) (1.3.1)
Requirement already satisfied: cffi>=1.14 in c:\programdata\anaconda3\lib\site-pac
kages (from trio~=0.17->selenium) (1.15.1)
Requirement already satisfied: wsproto>=0.14 in c:\programdata\anaconda3\lib\site-
packages (from trio-websocket~=0.9->selenium) (1.2.0)
Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in c:\programdata\anaco
nda3\lib\site-packages (from urllib3[socks]<3,>=1.26->selenium) (1.7.1)
Requirement already satisfied: pycparser in c:\programdata\anaconda3\lib\site-pack
ages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
Requirement already satisfied: h11<1,>=0.9.0 in c:\programdata\anaconda3\lib\site-
packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)
```

```
DEPRECATION: Loading egg at c:\programdata\anaconda3\lib\site-packages\vboxapi-1.0
-py3.11.egg is deprecated. pip 23.3 will enforce this behaviour change. A possible
replacement is to use pip for package installation..
```

In [2]: `!pip install beautifulsoup4`

```
Requirement already satisfied: beautifulsoup4 in c:\programdata\anaconda3\lib\site
-packages (4.12.2)
Requirement already satisfied: soupsieve>1.2 in c:\programdata\anaconda3\lib\site-
packages (from beautifulsoup4) (2.4)
```

```
DEPRECATION: Loading egg at c:\programdata\anaconda3\lib\site-packages\vboxapi-1.0
-py3.11.egg is deprecated. pip 23.3 will enforce this behaviour change. A possible
replacement is to use pip for package installation..
```

In [3]: `!pip install webdriver-manager`

```
Requirement already satisfied: webdriver-manager in c:\programdata\anaconda3\lib\s
ite-packages (4.0.2)
Requirement already satisfied: requests in c:\programdata\anaconda3\lib\site-packa
ges (from webdriver-manager) (2.31.0)
Requirement already satisfied: python-dotenv in c:\programdata\anaconda3\lib\site-
packages (from webdriver-manager) (0.21.0)
Requirement already satisfied: packaging in c:\programdata\anaconda3\lib\site-pack
ages (from webdriver-manager) (23.1)
Requirement already satisfied: charset-normalizer<4,>=2 in c:\programdata\anaconda
3\lib\site-packages (from requests->webdriver-manager) (2.0.4)
Requirement already satisfied: idna<4,>=2.5 in c:\programdata\anaconda3\lib\site-p
ackages (from requests->webdriver-manager) (3.4)
Requirement already satisfied: urllib3<3,>=1.21.1 in c:\programdata\anaconda3\lib
\site-packages (from requests->webdriver-manager) (1.26.16)
Requirement already satisfied: certifi>=2017.4.17 in c:\programdata\anaconda3\lib
\site-packages (from requests->webdriver-manager) (2023.7.22)
```

```
DEPRECATION: Loading egg at c:\programdata\anaconda3\lib\site-packages\vboxapi-1.0
-py3.11.egg is deprecated. pip 23.3 will enforce this behaviour change. A possible
replacement is to use pip for package installation..
```

In [4]:
```python
from selenium import webdriver
from selenium.webdriver.chrome.options import Options
from selenium.webdriver.chrome.service import Service as ChromeService

from webdriver_manager.chrome import ChromeDriverManager

from bs4 import BeautifulSoup

from selenium.webdriver.common.by import By
from selenium.webdriver.common.action_chains import ActionChains
from selenium.webdriver.support import expected_conditions as EC
from selenium.webdriver.support.ui import WebDriverWait

import time

import re
import pandas as pd
```

In [5]:
```python
pd.set_option('display.max_rows', 100)
pd.set_option('display.max_columns', None)
pd.set_option('display.width', None)
pd.set_option('display.max_colwidth', None)
```

In [6]:
```python
def web_driver():
    options = webdriver.ChromeOptions()
    # options.add_argument('--headless')
    options.add_argument('--window-size=1920, 1200')
    options.add_argument('--lang=pt-BR')
    # options.add_argument('--Lang=en-US')

    driver = webdriver.Chrome(
        service=ChromeService(ChromeDriverManager().install()),
        options=options
    )

    return driver

# web_driver()

def open_page(url):
    driver = web_driver()
    driver.get(url)
    soup = get_page_source(driver)
```

```python
        return driver, soup

    def get_page_source(driver):
        res = driver.page_source.encode('utf-8')
        soup = BeautifulSoup(res, 'html.parser')
        return soup
```

In [8]:
```python
driver, soup = open_page('https://store.steampowered.com/charts/mostplayed')

time.sleep(2)

soup = get_page_source(driver)

tb_rank = soup.find('table', attrs={'class': '_3arZn0BMPzyhcYNADe193m'})
tbody_rank = tb_rank.find('tbody')
tr_rank = tbody_rank.find_all('tr')

#print(tr_rank)
```

In [9]:
```python
def find_non_none(tag1, tag2):
    if tag1:
        print('tentei2')
        return tag1
    elif tag2:
        print('tentei')
        return tag2
    return None
```

In [26]:
```python
ls_jogos = []

for jogo_listado in tr_rank:
    caminho = jogo_listado.find('td', attrs={'class': '_18kGHKeOavDDdJVs9FVhpo'})
    nome = caminho.find('a').find('div').text
    jogadores_atuais = jogo_listado.find('td', attrs={'class': '_3L0CDDIUaOKTGfqdpc
    jogadores_atuais = jogadores_atuais.replace('.','')
    pico_jogadores = jogo_listado.find('td', attrs={'class': 'yJB7DYKsuTG2AYhJdWTIk
    pico_jogadores = pico_jogadores.replace('.','')
    caminho = jogo_listado.find('td', attrs={'class': '_3IyfUchPbsYMEaGjJU3GOP'})
    preco = ''
    try:
        preco = caminho.find('div').find('div').find('div', attrs={'class': '_3NhLu
        preco = preco.replace('R$','')
        preco = preco.replace(',','.')
    except Exception as e:
        #print(e)
        try:
            preco = caminho.find('div').find('div').find('div').text
            preco = preco.replace('Gratuito para jogar', '0')
            preco = preco.replace('Em breve','0')
            preco = preco.replace('Novidade','0')
            preco = preco.replace('R$','')
            preco = preco.replace(',','.')
        except:
            preco = '0'

    ls_jogos.append({
        'Nome': nome,
        'Preço': preco,
        'Jogadores Atuais': jogadores_atuais,
        'Pico de Jogadores': pico_jogadores
    })
```

In [27]:
```python
df = pd.DataFrame.from_dict(ls_jogos)

df
```

Out[27]:

	Nome	Preço	Jogadores Atuais	Pico de Jogadores
0	Counter-Strike 2	0	1276439	1281517
1	PUBG: BATTLEGROUNDS	0	683073	683073
2	Dota 2	0	624160	641741
3	Banana	0	427114	436877
4	NARAKA: BLADEPOINT	0	263787	295439
5	Call of Duty®	0	189707	299295
6	Grand Theft Auto V	55.05	142207	149765
7	Apex Legends™	0	135228	137801
8	Monster Hunter Wilds Beta test	0	134746	200164
9	THRONE AND LIBERTY	0	131631	165373
10	Wallpaper Engine	13.79	127953	142639
11	Rust	103.49	110989	135890
12	Black Myth: Wukong	229.99	107033	128168
13	War Thunder	0	105897	111114
14	Stardew Valley	24.99	102260	114598
15	Factorio	101.99	85710	107020
16	Once Human	0	78924	82600
17	Don't Starve Together	9.51	67012	74116
18	Monster Hunter: World	99.90	66075	67135
19	Baldur's Gate 3	199.99	65181	89172
20	Football Manager 2024	0	63143	65978
21	Warframe	0	62942	67567
22	The Forest	7.59	62758	77458
23	Sid Meier's Civilization® VI	129.00	61540	67408
24	Team Fortress 2	0	59599	65343
25	DayZ	74.99	56400	67827
26	Dragon Age™: The Veilguard	0	55318	84832
27	Left 4 Dead 2	3.29	53448	70272
28	Euro Truck Simulator 2	15.49	53084	53084
29	EA SPORTS FC™ 25	299.00	52890	60159
30	Dead by Daylight	23.98	51880	56123
31	Hearts of Iron IV	179.99	51329	59566
32	Crosshair X	17.49	51216	65016
33	Deadlock	0	50916	66031
34	Crab Game	0	50292	54085
35	Satisfactory	107.99	48272	60910

	Nome	Preço	Jogadores Atuais	Pico de Jogadores
36	Sons Of The Forest	48.94	45696	45696
37	Tom Clancy's Rainbow Six® Siege	84.99	45121	55502
38	Governor of Poker 3	0	42903	43776
39	Cyberpunk 2077	99.95	42758	42758
40	ELDEN RING	229.90	41657	44449
41	Red Dead Redemption 2	139.96	40735	40988
42	7 Days to Die	97.59	40624	40756
43	Overwatch® 2	0	39765	43857
44	Project Zomboid	40.19	38939	39580
45	HELLDIVERS™ 2	199.50	38273	56840
46	VRChat	0	37767	49526
47	Brotato	10.19	36956	38760
48	Farming Simulator 22	119.00	36871	39961
49	Valheim	18.99	36063	45176
50	Destiny 2	0	35861	44167
51	ARK: Survival Evolved	46.99	35727	36735
52	The Sims™ 4	0	35194	45266
53	tModLoader	0	35103	39950
54	Battlefield™ 2042	19.92	31536	31536
55	Terraria	32.99	30194	33923
56	Cats	0	30009	32692
57	New World: Aeternum	327.89	29623	41461
58	Total War: WARHAMMER III	119.60	28667	30626
59	Forza Horizon 4	249.00	28610	36221
60	Hogwarts Legacy	74.99	27913	27913
61	NBA 2K25	199.75	27850	29325
62	Metaphor: ReFantazio	299.90	27382	27781
63	ARK: Survival Ascended	147.40	27045	27466
64	Phasmophobia	44.99	26943	50463
65	Mount & Blade II: Bannerlord	199.99	26810	26980
66	RimWorld	79.99	26629	28013
67	Battlefield™ V	34.35	26271	30464
68	Liar's Bar	23.50	25859	31411
69	Street Fighter™ 6	124.50	24784	26850
70	STALCRAFT: X	0	24720	26891
71	Garry's Mod	25.99	23750	32234

	Nome	Preço	Jogadores Atuais	Pico de Jogadores
72	Eternal Return	0	23561	23561
73	The Elder Scrolls V: Skyrim Special Edition	149.00	23219	29007
74	Palworld	88.99	23089	23807
75	Yu-Gi-Oh! Master Duel	0	22678	24661
76	Hunt: Showdown 1896	65.99	22554	23417
77	Stellaris	35.99	22433	24328
78	Cities: Skylines	26.99	22346	23295
79	Crusader Kings III	179.99	22294	24594
80	Lost Ark	0	22000	24837
81	Age of Empires II: Definitive Edition	36.99	21954	24409
82	The Witcher 3: Wild Hunt	32.49	21922	21922
83	Dying Light	7.64	21345	23959
84	TCG Card Shop Simulator	41.99	21288	24533
85	SCUM	115.00	21198	21198
86	Diablo® IV	229.90	21066	22130
87	Europa Universalis IV	179.99	20886	22654
88	EA SPORTS FC™ 24	359.00	20372	22625
89	Lethal Company	23.09	19594	27432
90	Core Keeper	44.99	19560	20112
91	Squad	134.99	19511	20089
92	The Binding of Isaac: Rebirth	27.99	19357	21803
93	No Man's Sky	64.80	19021	19904
94	It Takes Two	69.65	18990	24091
95	Unturned	0	18840	20362
96	Goose Goose Duck	0	18653	19713
97	Fallout 4	59.99	18563	21308
98	Russian Fishing 4	0	18414	18414
99	BeamNG.drive	59.99	18318	24451

In [28]:
```python
df.dtypes
```

Out[28]:
```
Nome                  object
Preço                 object
Jogadores Atuais      object
Pico de Jogadores     object
dtype: object
```

In [29]:
```python
import pickle

with open('df_jogos.pkl', 'wb') as pkl_file:
    pickle.dump(df, pkl_file)
```

In [ ]: