```
fpat = '/content/Valve_Player_Data.csv'

import pandas as p
import numpy as n
```

```
steem = p.read_csv(fpat)
steem
```

	Month_Year	Avg_players	Gain	Percent_Gain	Peak_Players	URL	Date	Game_Name
0	September 2021	512350.92	268.96	+0.05%	942519	https://steamcharts.com/app/730	2021-09-01	Counter Strike: Global Offensive
1	August 2021	512081.96	6014.60	+1.19%	802544	https://steamcharts.com/app/730	2021-08-01	Counter Strike: Global Offensive
2	July 2021	506067.36	-43279.72	-7.88%	763523	https://steamcharts.com/app/730	2021-07-01	Counter Strike: Global Offensive
3	June 2021	549347.08	-110541.81	-16.75%	929940	https://steamcharts.com/app/730	2021-06-01	Counter Strike: Global Offensive
4	May 2021	659888.89	-63457.63	-8.77%	1087197	https://steamcharts.com/app/730	2021-05-01	Counter Strike: Global Offensive
...	...	...	...	...	...	...	...	...
5266	December 2016	192.03	-21.90	-10.24%	405	https://steamcharts.com/app/435150	2016-12-01	Divinity: Original Sin 2
5267	November 2016	213.92	-134.68	-38.63%	537	https://steamcharts.com/app/435150	2016-11-01	Divinity: Original Sin 2
5268	October 2016	348.60	-201.75	-36.66%	1031	https://steamcharts.com/app/435150	2016-10-01	Divinity: Original Sin 2
5269	September 2016	550.36	543.26	+7654.89%	2836	https://steamcharts.com/app/435150	2016-09-01	Divinity: Original Sin 2

Next steps: View recommended plots

```
'''Total number of players (playing the top 100 games on Steam)'''

tps = n.sum(steem['Peak_Players'])
print('the total concurrent players playing the top 100 games in steam are: ',tps, 'players')
```

```
the total concurrent players playing the top 100 games in steam are:  370660510 players
```

```
'''Selected game's player data statistics'''
# For Grandt theft Auto V

gtav = p.DataFrame(steem)
gtav = steem[steem['Game_Name'] == 'Grand Theft Auto V'].copy()
gtav.drop(['URL'], axis = 1, inplace = True)
gtav
```

	Month_Year	Avg_players	Gain	Percent_Gain	Peak_Players	Date	Game_Name
399	September 2021	81232.20	-37668.37	-31.68%	151408	2021-09-01	Grand Theft Auto V
400	August 2021	118900.57	5905.15	+5.23%	214591	2021-08-01	Grand Theft Auto V
401	July 2021	112995.42	24080.02	+27.08%	218784	2021-07-01	Grand Theft Auto V
402	June 2021	88915.40	4158.64	+4.91%	155599	2021-06-01	Grand Theft Auto V
403	May 2021	84756.76	-7891.05	-8.52%	146011	2021-05-01	Grand Theft Auto V
...	...	...	...	...	...	...	...
472	August 2015	30918.06	-6739.01	-17.90%	50693	2015-08-01	Grand Theft Auto V
473	July 2015	37657.07	-9296.17	-19.80%	60908	2015-07-01	Grand Theft Auto V
474	June 2015	46953.24	-46408.38	-49.71%	85195	2015-06-01	Grand Theft Auto V
475	May 2015	93361.62	-99352.39	-51.55%	215966	2015-05-01	Grand Theft Auto V
476	April 2015	192714.01	NaN	NaN	360761	2015-04-01	Grand Theft Auto V

78 rows × 7 columns

```
gtav.describe()
```

	Avg_players	Gain	Peak_Players
count	78.000000	77.000000	78.000000
mean	66853.732821	-1447.815974	130186.115385
std	31380.729175	19481.052787	59941.682316
min	25230.190000	-99352.390000	46917.000000
25%	43073.527500	-7147.940000	85127.500000
50%	58390.150000	-500.100000	118271.000000
75%	87487.960000	6908.240000	160854.500000
max	192714.010000	36151.780000	360761.000000

```
# GTA V

'''get the total players of the game based on peak pllayers'''

gtatot = n.sum(gtav['Peak_Players'])
```

```
print('Total players of GTA V in Steam from 2015 - 2021: ',gtatot, 'players')

'''lowest average players of the game'''

gtamin = n.min(gtav['Avg_players'])
print('Lowest players of GTA V: ',gtamin, 'players')


'''highest peak players of the game'''

hpgtav = n.max(gtav['Peak_Players'])
print('The highest peak players of GTA V: ',hpgtav, 'players')
```

```
Total players of GTA V in Steam from 2015 - 2021:  10154517 players
Lowest players of GTA V:  25230.19 players
The highest peak players of GTA V:  360761 players
```

```
1
```

```
the highest peak players of GTA V:  360761 players
```

```
'''Selected game's player data statistics'''
# For Apex Legends

al = p.DataFrame(steem)
al = steem[steem['Game_Name'] == 'Apex Legends'].copy()
al.drop(['URL'], axis = 1, inplace = True)
al
```

	Month_Year	Avg_players	Gain	Percent_Gain	Peak_Players	Date	Game_Name
277	September 2021	139647.96	-29880.22	-17.63%	273617	2021-09-01	Apex Legends
278	August 2021	169528.17	38377.10	+29.26%	330476	2021-08-01	Apex Legends
279	July 2021	131151.07	-5288.83	-3.88%	262129	2021-07-01	Apex Legends
280	June 2021	136439.90	-27798.11	-16.93%	266591	2021-06-01	Apex Legends
281	May 2021	164238.01	39332.88	+31.49%	330879	2021-05-01	Apex Legends
282	April 2021	124905.13	-1215.93	-0.96%	217728	2021-04-01	Apex Legends
283	March 2021	126121.06	5138.42	+4.25%	228439	2021-03-01	Apex Legends
284	February 2021	120982.64	49215.90	+68.58%	196799	2021-02-01	Apex Legends
285	January 2021	71766.74	7296.99	+11.32%	129928	2021-01-01	Apex Legends

```
al.describe()
```

	Avg_players	Gain	Peak_Players
count	11.000000	10.000000	11.000000
mean	120382.517273	6469.070000	224168.636364
std	35623.711715	27705.280593	78786.294698
min	64469.750000	-29880.220000	112076.000000
25%	97969.950000	-9187.832500	163363.500000
50%	126121.060000	1961.245000	228439.000000

```
# Apex Legends

'''get the total players of the game based on peak players'''

altot = n.sum(al['Peak_Players'])
print('Total players of Apex Legends in Steam from 2020 - 2021: ',altot, 'players')

'''lowest average players of the game'''

almin = n.min(al['Avg_players'])
print('Lowest players of Apex Legends: ',almin, 'players')

'''highest peak players of the game'''

hpal = n.max(al['Peak_Players'])
print('The highest peak players of Apex Legends: ',hpal, 'players')
```

```
Total players of Apex Legends in Steam from 2020 - 2021:  2465855 players
Lowest players of Apex Legends:  64469.75 players
The highest peak players of Apex Legends:  330879 players
```