The 3 Goats: Data Scraping

Before working on the backend part of the project, I needed to grab the necessary data from the ESPN website. For all 3 of the players, the data I will be scaping "regular season average", "regular season total", "postseason average", "postseason total". The data will be stored in this these variables:

Lebron player: 1	Kobe player: 2	Micheal player: 3
lebron_regular_season_average	kobe_regular_season_average	micheal_regular_season_average
lebron_regular_season_total	kobe_regular_season_total	micheal_regular_season_total
lebron_postseason_average	kobe_postseason_average	micheal_postseason_average
lebron_postseason_total	kobe_postseason_total	micheal_postseason_total

The data should be tabular.

In [1]:
```
# Import libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import re
import requests
from bs4 import BeautifulSoup
%matplotlib inline
```

Lebron

In [2]:
```
# Last extraction: April 28, 2021
# Grabbing Lebron's regular seasons stats.
url_lebron_regular = "https://www.espn.com/nba/player/stats/_/id/1966/lebron-jam
df_lebron_reg = pd.read_html(url_lebron_regular)
# Grabbing Lebron's postseason stats
url_lebron_post = "https://www.espn.com/nba/player/stats/_/id/1966/type/nba/seas
# This will provide the "seasons" & the "Team" that he played for.
df_lebron_post = pd.read_html(url_lebron_post)
# This will provide the regular season teams
lebron_teams_reg = df_lebron_reg[0]
# This will provide the post season teams
lebron_teams_post = df_lebron_post[0]
# This will provide the regular season average
lebron_regular_season_average_stats = df_lebron_reg[1]
# This will provide the regular season total
lebron_regular_season_total_stats = df_lebron_reg[3]
# This will provide the postseason average
lebron_postseason_average_stats = df_lebron_post[1]
# This will provide the postseason total
lebron_postseason_total_stats = df_lebron_post[3]
```

Regular Season Stats

Average

In [3]:
```
lebron_teams_reg.head()
```

Out[3]:

	season	Team
0	2003-04	CLE
1	2004-05	CLE
2	2005-06	CLE
3	2006-07	CLE
4	2007-08	CLE

In [4]:
```
lebron_regular_season_average_stats.head()
```

Out[4]:

	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	F
0	79	79	39.5	7.9-18.9	41.7	0.8-2.7	29.0	4.4-5.8	75.4	1.3	4.2	5.5	5.9	0.7	1.6	1.9	3.5	2
1	80	80	42.4	9.9-21.1	47.2	1.4-3.9	35.1	6.0-8.0	75.0	1.4	6.0	7.4	7.2	0.7	2.2	1.8	3.3	2
2	79	79	42.5	11.1-23.1	48.0	1.6-4.8	33.5	7.6-10.3	73.8	0.9	6.1	7.0	6.6	0.8	1.6	2.3	3.3	3
3	78	78	40.9	9.9-20.8	47.6	1.3-4.0	31.9	6.3-9.0	69.8	1.1	5.7	6.7	6.0	0.7	1.6	2.2	3.2	2
4	75	74	40.4	10.6-21.9	48.4	1.5-4.8	31.5	7.3-10.3	71.2	1.8	6.1	7.9	7.2	1.1	1.8	2.2	3.4	3

In [5]:
```
lebron_full_regular_average_stats = lebron_teams_reg.join(lebron_regular_season_
lebron_full_regular_average_stats.head()
```

Out[5]:

	season	Team	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	S
0	2003-04	CLE	79	79	39.5	7.9-18.9	41.7	0.8-2.7	29.0	4.4-5.8	75.4	1.3	4.2	5.5	5.9	0.7	
1	2004-05	CLE	80	80	42.4	9.9-21.1	47.2	1.4-3.9	35.1	6.0-8.0	75.0	1.4	6.0	7.4	7.2	0.7	
2	2005-06	CLE	79	79	42.5	11.1-23.1	48.0	1.6-4.8	33.5	7.6-10.3	73.8	0.9	6.1	7.0	6.6	0.8	
3	2006-07	CLE	78	78	40.9	9.9-20.8	47.6	1.3-4.0	31.9	6.3-9.0	69.8	1.1	5.7	6.7	6.0	0.7	
4	2007-08	CLE	75	74	40.4	10.6-21.9	48.4	1.5-4.8	31.5	7.3-10.3	71.2	1.8	6.1	7.9	7.2	1.1	

In [6]:
```
lebron_full_regular_average_stats['player'] = 1
lebron_full_regular_average_stats
```

Out[6]:

	season	Team	GP	GS	MIN	FG	FG%	3PT	3P%	FT	...	OR	DR	REB	AST	BLK
0	2003-04	CLE	79	79	39.5	7.9-18.9	41.7	0.8-2.7	29.0	4.4-5.8	...	1.3	4.2	5.5	5.9	0.7

	season	Team	GP	GS	MIN	FG	FG%	3PT	3P%	FT	...	OR	DR	REB	AST	BLK
1	2004-05	CLE	80	80	42.4	9.9-21.1	47.2	1.4-3.9	35.1	6.0-8.0	...	1.4	6.0	7.4	7.2	0.7
2	2005-06	CLE	79	79	42.5	11.1-23.1	48.0	1.6-4.8	33.5	7.6-10.3	...	0.9	6.1	7.0	6.6	0.8
3	2006-07	CLE	78	78	40.9	9.9-20.8	47.6	1.3-4.0	31.9	6.3-9.0	...	1.1	5.7	6.7	6.0	0.7
4	2007-08	CLE	75	74	40.4	10.6-21.9	48.4	1.5-4.8	31.5	7.3-10.3	...	1.8	6.1	7.9	7.2	1.1
5	2008-09	CLE	81	81	37.7	9.7-19.9	48.9	1.6-4.7	34.4	7.3-9.4	...	1.3	6.3	7.6	7.2	1.1
6	2009-10	CLE	76	76	39.0	10.1-20.1	50.3	1.7-5.1	33.3	7.8-10.2	...	0.9	6.4	7.3	8.6	1.0
7	2010-11	MIA	79	79	38.8	9.6-18.8	51.0	1.2-3.5	33.0	6.4-8.4	...	1.0	6.5	7.5	7.0	0.6
8	2011-12	MIA	62	62	37.5	10.0-18.9	53.1	0.9-2.4	36.2	6.2-8.1	...	1.5	6.4	7.9	6.2	0.8
9	2012-13	MIA	76	76	37.9	10.1-17.8	56.5	1.4-3.3	40.6	5.3-7.0	...	1.3	6.8	8.0	7.3	0.9
10	2013-14	MIA	77	77	37.7	10.0-17.6	56.7	1.5-4.0	37.9	5.7-7.6	...	1.1	5.9	6.9	6.3	0.3
11	2014-15	CLE	69	69	36.1	9.0-18.5	48.8	1.7-4.9	35.4	5.4-7.7	...	0.7	5.3	6.0	7.4	0.7
12	2015-16	CLE	76	76	35.6	9.7-18.6	52.0	1.1-3.7	30.9	4.7-6.5	...	1.5	6.0	7.4	6.8	0.6
13	2016-17	CLE	74	74	37.8	9.9-18.2	54.8	1.7-4.6	36.3	4.8-7.2	...	1.3	7.3	8.6	8.7	0.6
14	2017-18	CLE	82	82	36.9	10.5-19.3	54.2	1.8-5.0	36.7	4.7-6.5	...	1.2	7.5	8.6	9.1	0.9
15	2018-19	LAL	55	55	35.2	10.1-19.9	51.0	2.0-5.9	33.9	5.1-7.6	...	1.0	7.4	8.5	8.3	0.6
16	2019-20	LAL	67	67	34.6	9.6-19.4	49.3	2.2-6.3	34.8	3.9-5.7	...	1.0	6.9	7.8	10.2	0.5
17	2020-21	LAL	41	41	33.9	9.5-18.4	51.3	2.4-6.5	36.8	4.1-5.8	...	0.6	7.3	7.9	7.9	0.6
18	Career	NaN	1306	1305	38.2	9.9-19.6	50.4	1.5-4.4	34.5	5.8-7.9	...	1.2	6.3	7.4	7.4	0.8

19 rows × 21 columns

In [7]:
```
lebron_regular_season_average = lebron_full_regular_average_stats.rename(columns
```

In [8]:
```
lebron_regular_season_average.head()
```

Out[8]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl	p

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl	p
0	2003-04	CLE	79	79	39.5	7.9-18.9	41.7	0.8-2.7	29.0	4.4-5.8	...	1.3	4.2	5.5	5.9	0.7	1.6	1.9
1	2004-05	CLE	80	80	42.4	9.9-21.1	47.2	1.4-3.9	35.1	6.0-8.0	...	1.4	6.0	7.4	7.2	0.7	2.2	1.8
2	2005-06	CLE	79	79	42.5	11.1-23.1	48.0	1.6-4.8	33.5	7.6-10.3	...	0.9	6.1	7.0	6.6	0.8	1.6	2.3
3	2006-07	CLE	78	78	40.9	9.9-20.8	47.6	1.3-4.0	31.9	6.3-9.0	...	1.1	5.7	6.7	6.0	0.7	1.6	2.2
4	2007-08	CLE	75	74	40.4	10.6-21.9	48.4	1.5-4.8	31.5	7.3-10.3	...	1.8	6.1	7.9	7.2	1.1	1.8	2.2

5 rows × 21 columns

Total

In [9]:
```
lebron_regular_season_total_stats.head()
```

Out[9]:

	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	PTS
0	622-1492	41.7	63-217	29.0	347-460	75.4	99	333	432	465	58	130	149	273	1654
1	795-1684	47.2	108-308	35.1	477-636	75.0	111	477	588	577	52	177	146	262	2175
2	875-1823	48.0	127-379	33.5	601-814	73.8	75	481	556	521	66	123	181	260	2478
3	772-1621	47.6	99-310	31.9	489-701	69.8	83	443	526	470	55	125	171	250	2132
4	794-1642	48.4	113-359	31.5	549-771	71.2	133	459	592	539	81	138	165	255	2250

In [10]:
```
lebron_full_regular_total_stats = lebron_teams_reg.join(lebron_regular_season_to
lebron_full_regular_total_stats['player'] = 1
```

In [11]:
```
lebron_regular_season_total = lebron_full_regular_total_stats.rename(columns=str
```

In [12]:
```
lebron_regular_season_total.head()
```

Out[12]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	to
0	2003-04	CLE	622-1492	41.7	63-217	29.0	347-460	75.4	99	333	432	465	58	130	149	273
1	2004-05	CLE	795-1684	47.2	108-308	35.1	477-636	75.0	111	477	588	577	52	177	146	262
2	2005-06	CLE	875-1823	48.0	127-379	33.5	601-814	73.8	75	481	556	521	66	123	181	260
3	2006-07	CLE	772-1621	47.6	99-310	31.9	489-701	69.8	83	443	526	470	55	125	171	250

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	to
4	2007-08	CLE	794-1642	48.4	113-359	31.5	549-771	71.2	133	459	592	539	81	138	165	255

Postseason Stats

Average

In [13]:
```
lebron_postseason_average_stats.head()
```

Out[13]:

	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO
0	13	13	46.5	11.2-23.6	47.6	1.6-4.8	33.3	6.7-9.1	73.7	1.7	6.4	8.1	5.8	0.7	1.4	3.4	5.0
1	20	20	44.7	8.3-20.0	41.6	1.1-3.8	28.0	7.4-9.8	75.5	1.3	6.8	8.1	8.0	0.5	1.7	2.0	3.3
2	13	13	42.5	8.7-21.2	41.1	1.4-5.4	25.7	9.4-12.8	73.1	1.2	6.6	7.8	7.6	1.3	1.8	2.5	4.2
3	14	14	41.4	11.4-22.3	51.0	1.9-5.8	33.3	10.6-14.2	74.9	1.4	7.8	9.1	7.3	0.9	1.6	2.1	2.7
4	11	11	41.8	9.6-19.2	50.2	1.8-4.5	40.0	8.0-10.9	73.3	1.4	7.9	9.3	7.6	1.8	1.7	2.1	3.8

In [14]:
```
lebron_full_postseason_average_stats = lebron_teams_post.join(lebron_postseason_
lebron_full_postseason_average_stats['player'] = 1
lebron_postseason_average = lebron_full_postseason_average_stats.rename(columns=
lebron_postseason_average
```

Out[14]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	st
0	2005-06	CLE	13	13	46.5	11.2-23.6	47.6	1.6-4.8	33.3	6.7-9.1	...	1.7	6.4	8.1	5.8	0.7	1.4
1	2006-07	CLE	20	20	44.7	8.3-20.0	41.6	1.1-3.8	28.0	7.4-9.8	...	1.3	6.8	8.1	8.0	0.5	1.7
2	2007-08	CLE	13	13	42.5	8.7-21.2	41.1	1.4-5.4	25.7	9.4-12.8	...	1.2	6.6	7.8	7.6	1.3	1.8
3	2008-09	CLE	14	14	41.4	11.4-22.3	51.0	1.9-5.8	33.3	10.6-14.2	...	1.4	7.8	9.1	7.3	0.9	1.6
4	2009-10	CLE	11	11	41.8	9.6-19.2	50.2	1.8-4.5	40.0	8.0-10.9	...	1.4	7.9	9.3	7.6	1.8	1.7
5	2010-11	MIA	21	21	43.9	8.3-17.8	46.6	1.4-4.0	35.3	5.7-7.4	...	1.6	6.8	8.4	5.9	1.2	1.7
6	2011-12	MIA	23	23	42.7	10.9-21.8	50.0	1.0-3.7	25.9	7.5-10.2	...	2.3	7.4	9.7	5.6	0.7	1.9
7	2012-13	MIA	23	23	41.7	9.2-18.8	49.1	1.6-4.2	37.5	5.9-7.6	...	1.6	6.8	8.4	6.6	0.8	1.8
8	2013-14	MIA	20	20	38.2	9.6-17.0	56.5	1.8-4.3	40.7	6.5-8.0	...	0.7	6.4	7.1	4.8	0.6	1.8

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	st
9	2014-15	CLE	20	20	42.2	11.4-27.2	41.7	1.3-5.5	22.7	6.1-8.4	...	1.9	9.5	11.3	8.5	1.1	1.7
10	2015-16	CLE	21	21	39.1	10.4-19.9	52.5	1.5-4.5	34.0	3.9-5.9	...	2.0	7.5	9.5	7.6	1.3	2.3
11	2016-17	CLE	18	18	41.3	12.1-21.3	56.5	2.4-5.9	41.1	6.3-9.0	...	1.1	8.1	9.1	7.8	1.3	1.9
12	2017-18	CLE	22	22	41.9	12.5-23.2	53.9	1.8-5.2	34.2	7.2-9.7	...	1.4	7.7	9.1	9.0	1.0	1.4
13	2019-20	LAL	21	21	36.3	10.2-18.2	56.0	2.1-5.7	37.0	5.1-7.1	...	1.3	9.4	10.8	8.8	0.9	1.2
14	Career	NaN	260	260	41.6	10.3-20.7	49.6	1.6-4.8	33.5	6.7-9.0	...	1.5	7.5	9.0	7.2	1.0	1.7

15 rows × 21 columns

Total

In [15]:
```
lebron_postseason_total_stats.head()
```

Out[15]:

	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	PTS
0	146-307	47.6	21-63	33.3	87-118	73.7	22	83	105	76	9	18	44	65	400
1	166-399	41.6	21-75	28.0	148-196	75.5	26	135	161	159	10	34	40	66	501
2	113-275	41.1	18-70	25.7	122-167	73.1	16	86	102	99	17	23	33	54	366
3	159-312	51.0	27-81	33.3	149-199	74.9	19	109	128	102	12	23	30	38	494
4	106-211	50.2	20-50	40.0	88-120	73.3	15	87	102	84	20	19	23	42	320

In [16]:
```
lebron_full_postseason_total_stats = lebron_teams_post.join(lebron_postseason_to
lebron_full_postseason_total_stats['player'] = 1
lebron_postseason_total = lebron_full_postseason_total_stats.rename(columns=str.
lebron_postseason_total.tail()
```

Out[16]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf
10	2015-16	CLE	219-417	52.5	32-94	34.0	82-124	66.1	42	158	200	160	27	49	54
11	2016-17	CLE	217-384	56.5	44-107	41.1	113-162	69.8	19	145	164	141	23	35	43
12	2017-18	CLE	275-510	53.9	39-114	34.2	159-213	74.6	31	169	200	198	23	30	52
13	2019-20	LAL	214-382	56.0	44-119	37.0	108-150	72.0	28	198	226	184	18	26	40
14	Career	NaN	2671-5388	49.6	414-1235	33.5	1735-2341	74.1	394	1954	2348	1871	250	445	609

Kobe

In [17]:
```
# Last extraction: April 28, 2021
# Grabbing Kobe's regular seasons stats.
url_kobe_regular = "https://www.espn.com/nba/player/stats/_/id/110/kobe-bryant"
df_kobe_reg = pd.read_html(url_kobe_regular)
# Grabbing Kobe's postseason stats
url_kobe_post = "https://www.espn.com/nba/player/stats/_/id/110/type/nba/seasont
# This will provide the "seasons" & the "Team" that he played for.
df_kobe_post = pd.read_html(url_kobe_post)
# This will provide the regular season teams
kobe_teams_reg = df_kobe_reg[0]
# This will provide the post season teams
kobe_teams_post = df_kobe_post[0]
# This will provide the regular season average
kobe_regular_season_average_stats = df_kobe_reg[1]
# This will provide the regular season total
kobe_regular_season_total_stats = df_kobe_reg[3]
# This will provide the postseason average
kobe_postseason_average_stats = df_kobe_post[1]
# This will provide the postseason total
kobe_postseason_total_stats = df_kobe_post[3]
```

Regular Season Stats

Average

In [18]:
```
kobe_teams_reg.head()
```

Out[18]:

	season	Team
0	1996-97	LAL
1	1997-98	LAL
2	1998-99	LAL
3	1999-00	LAL
4	2000-01	LAL

In [19]:
```
kobe_regular_season_average_stats.head()
```

Out[19]:

	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	F
0	71	6	15.5	2.5-5.9	41.7	0.7-1.9	37.5	1.9-2.3	81.9	0.7	1.2	1.9	1.3	0.3	0.7	1.4	1.6	
1	79	1	26.0	4.9-11.6	42.8	0.9-2.8	34.1	4.6-5.8	79.4	1.0	2.1	3.1	2.5	0.5	0.9	2.3	2.0	1
2	50	50	37.9	7.2-15.6	46.5	0.5-2.0	26.7	4.9-5.8	83.9	1.1	4.2	5.3	3.8	1.0	1.4	3.1	3.1	1
3	66	62	38.2	8.4-17.9	46.8	0.7-2.2	31.9	5.0-6.1	82.1	1.6	4.7	6.3	4.9	0.9	1.6	3.3	2.8	2

	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	F
4	68	68	40.9	10.3-22.2	46.4	0.9-2.9	30.5	7.0-8.2	85.3	1.5	4.3	5.9	5.0	0.6	1.7	3.3	3.2	2

In [20]:
```
kobe_full_regular_average_stats = kobe_teams_reg.join(kobe_regular_season_averag
kobe_full_regular_average_stats['player'] = 2
kobe_regular_season_average = kobe_full_regular_average_stats.rename(columns=str
kobe_regular_season_average.head()
```

Out[20]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl	p
0	1996-97	LAL	71	6	15.5	2.5-5.9	41.7	0.7-1.9	37.5	1.9-2.3	...	0.7	1.2	1.9	1.3	0.3	0.7	1.4
1	1997-98	LAL	79	1	26.0	4.9-11.6	42.8	0.9-2.8	34.1	4.6-5.8	...	1.0	2.1	3.1	2.5	0.5	0.9	2.3
2	1998-99	LAL	50	50	37.9	7.2-15.6	46.5	0.5-2.0	26.7	4.9-5.8	...	1.1	4.2	5.3	3.8	1.0	1.4	3.
3	1999-00	LAL	66	62	38.2	8.4-17.9	46.8	0.7-2.2	31.9	5.0-6.1	...	1.6	4.7	6.3	4.9	0.9	1.6	3.3
4	2000-01	LAL	68	68	40.9	10.3-22.2	46.4	0.9-2.9	30.5	7.0-8.2	...	1.5	4.3	5.9	5.0	0.6	1.7	3.3

5 rows × 21 columns

Total

In [21]:
```
kobe_regular_season_total_stats.head()
```

Out[21]:

	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	PTS
0	176-422	41.7	51-136	37.5	136-166	81.9	47	85	132	91	23	49	102	112	539
1	391-913	42.8	75-220	34.1	363-457	79.4	79	163	242	199	40	74	180	157	1220
2	362-779	46.5	27-101	26.7	245-292	83.9	53	211	264	190	50	72	153	157	996
3	554-1183	46.8	46-144	31.9	331-403	82.1	108	308	416	323	62	106	220	182	1485
4	701-1510	46.4	61-200	30.5	475-557	85.3	104	295	399	338	43	114	222	220	1938

In [22]:
```
kobe_full_regular_total_stats = kobe_teams_reg.join(kobe_regular_season_total_st
kobe_full_regular_total_stats['player'] = 2
kobe_regular_season_total = kobe_full_regular_total_stats.rename(columns=str.low
kobe_regular_season_total.head()
```

Out[22]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	to
0	1996-97	LAL	176-422	41.7	51-136	37.5	136-166	81.9	47	85	132	91	23	49	102	112

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	to	
1	1997-98	LAL	391-913	42.8	75-220	34.1	363-457	79.4	79	163	242	199	40	74	180	157	1
2	1998-99	LAL	362-779	46.5	27-101	26.7	245-292	83.9	53	211	264	190	50	72	153	157	
3	1999-00	LAL	554-1183	46.8	46-144	31.9	331-403	82.1	108	308	416	323	62	106	220	182	1
4	2000-01	LAL	701-1510	46.4	61-200	30.5	475-557	85.3	104	295	399	338	43	114	222	220	1

Postseason Stats

Average

In [23]:
```
kobe_postseason_average_stats.head()
```

Out[23]:

	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	P
0	9	0	14.8	2.3-6.1	38.2	0.7-2.6	26.1	2.9-3.3	86.7	0.1	1.1	1.2	1.2	0.2	0.3	2.6	1.6	
1	11	0	20.0	2.8-6.9	40.8	0.3-1.3	21.4	2.8-4.1	68.9	0.6	1.3	1.9	1.5	0.7	0.3	2.5	1.0	
2	8	8	39.4	7.6-17.8	43.0	1.0-2.9	34.8	3.5-4.4	80.0	1.6	5.3	6.9	4.6	1.3	1.9	3.0	3.9	1
3	22	22	39.0	7.9-17.9	44.2	1.0-2.9	34.4	4.3-5.7	75.4	1.2	3.3	4.5	4.4	1.5	1.5	4.0	2.5	2
4	16	16	43.4	10.5-22.4	46.9	0.7-2.1	32.4	7.8-9.4	82.1	1.8	5.4	7.3	6.1	0.8	1.6	3.3	3.2	2

In [24]:
```
kobe_full_postseason_average_stats = kobe_teams_post.join(kobe_postseason_averag
kobe_full_postseason_average_stats['player'] = 2
kobe_postseason_average = kobe_full_postseason_average_stats.rename(columns=str.
kobe_postseason_average.tail()
```

Out[24]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl
11	2008-09	LAL	23	23	40.9	10.5-23.0	45.7	1.6-4.6	34.9	7.6-8.6	...	0.8	4.5	5.3	5.5	0.9	1.7
12	2009-10	LAL	23	23	40.1	10.2-22.2	45.8	2.1-5.7	37.4	6.7-8.0	...	1.1	4.9	6.0	5.5	0.7	1.3
13	2010-11	LAL	10	10	35.4	8.3-18.6	44.6	1.2-4.1	29.3	5.0-6.1	...	0.8	2.6	3.4	3.3	0.3	1.6
14	2011-12	LAL	12	12	39.7	11.0-25.1	43.9	1.4-5.0	28.3	6.6-7.9	...	1.3	3.5	4.8	4.3	0.2	1.3
15	Career	NaN	220	200	39.3	9.2-20.5	44.8	1.3-4.0	33.1	6.0-7.4	...	1.0	4.0	5.1	4.7	0.7	1.4

5 rows × 21 columns

Total

In [25]:
```
kobe_postseason_total_stats
```

Out[25]:

	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	PTS
0	21-55	38.2	6-23	26.1	26-30	86.7	1	10	11	11	2	3	23	14	74
1	31-76	40.8	3-14	21.4	31-45	68.9	7	14	21	16	8	3	28	11	96
2	61-142	43.0	8-23	34.8	28-35	80.0	13	42	55	37	10	15	24	31	158
3	174-394	44.2	22-64	34.4	95-126	75.4	26	72	98	97	32	32	89	55	465
4	168-358	46.9	11-34	32.4	124-151	82.1	29	87	116	97	12	25	53	51	471
5	187-431	43.4	22-58	37.9	110-145	75.9	28	83	111	87	17	27	65	54	506
6	137-317	43.2	25-62	40.3	86-104	82.7	16	45	61	62	1	14	35	42	385
7	190-460	41.3	24-97	24.7	135-166	81.3	18	86	104	121	7	42	59	61	539
8	72-145	49.7	14-35	40.0	37-48	77.1	4	40	44	36	3	8	25	33	195
9	60-130	46.2	10-28	35.7	34-37	91.9	1	25	26	22	2	5	10	22	164
10	222-463	47.9	32-106	30.2	157-194	80.9	18	101	119	117	8	35	59	70	633
11	242-530	45.7	37-106	34.9	174-197	88.3	19	104	123	126	21	38	59	59	695
12	234-511	45.8	49-131	37.4	154-183	84.2	26	112	138	126	16	31	75	79	671
13	83-186	44.6	12-41	29.3	50-61	82.0	8	26	34	33	3	16	23	31	228
14	132-301	43.9	17-60	28.3	79-95	83.2	16	42	58	52	2	16	33	34	360
15	2014-4499	44.8	292-882	33.1	1320-1617	81.6	230	889	1119	1040	144	310	660	647	5640

In [26]:
```
kobe_full_postseason_total_stats = kobe_teams_post.join(kobe_postseason_total_st
kobe_full_postseason_total_stats['player'] = 2
kobe_postseason_total = kobe_full_postseason_total_stats.rename(columns=str.lowe
kobe_postseason_total
```

Out[26]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf
0	1996-97	LAL	21-55	38.2	6-23	26.1	26-30	86.7	1	10	11	11	2	3	23

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	
1	1997-98	LAL	31-76	40.8	3-14	21.4	31-45	68.9	7	14	21	16	8	3	28	
2	1998-99	LAL	61-142	43.0	8-23	34.8	28-35	80.0	13	42	55	37	10	15	24	
3	1999-00	LAL	174-394	44.2	22-64	34.4	95-126	75.4	26	72	98	97	32	32	89	
4	2000-01	LAL	168-358	46.9	11-34	32.4	124-151	82.1	29	87	116	97	12	25	53	
5	2001-02	LAL	187-431	43.4	22-58	37.9	110-145	75.9	28	83	111	87	17	27	65	
6	2002-03	LAL	137-317	43.2	25-62	40.3	86-104	82.7	16	45	61	62	1	14	35	
7	2003-04	LAL	190-460	41.3	24-97	24.7	135-166	81.3	18	86	104	121	7	42	59	
8	2005-06	LAL	72-145	49.7	14-35	40.0	37-48	77.1	4	40	44	36	3	8	25	
9	2006-07	LAL	60-130	46.2	10-28	35.7	34-37	91.9	1	25	26	22	2	5	10	
10	2007-08	LAL	222-463	47.9	32-106	30.2	157-194	80.9	18	101	119	117	8	35	59	
11	2008-09	LAL	242-530	45.7	37-106	34.9	174-197	88.3	19	104	123	126	21	38	59	
12	2009-10	LAL	234-511	45.8	49-131	37.4	154-183	84.2	26	112	138	126	16	31	75	
13	2010-11	LAL	83-186	44.6	12-41	29.3	50-61	82.0	8	26	34	33	3	16	23	
14	2011-12	LAL	132-301	43.9	17-60	28.3	79-95	83.2	16	42	58	52	2	16	33	
15	Career	NaN	2014-4499	44.8	292-882	33.1	1320-1617	81.6	230	889	1119	1040	144	310	660	6

Micheal

In [27]:
```
# Last extraction: April 28, 2021
# Grabbing Micheal's regular seasons stats.
url_micheal_regular = "https://www.espn.com/nba/player/stats/_/id/1035/michael-j
df_micheal_reg = pd.read_html(url_micheal_regular)
# Grabbing Kobe's postseason stats
url_micheal_post = "https://www.espn.com/nba/player/stats/_/id/1035/type/nba/sea
# This will provide the "seasons" & the "Team" that he played for.
df_micheal_post = pd.read_html(url_micheal_post)
# This will provide the regular season teams
micheal_teams_reg = df_micheal_reg[0]
# This will provide the post season teams
micheal_teams_post = df_micheal_post[0]
# This will provide the regular season average
micheal_regular_season_average_stats = df_micheal_reg[1]
```

```
# This will provide the regular season total
micheal_regular_season_total_stats = df_micheal_reg[3]
# This will provide the postseason average
micheal_postseason_average_stats = df_micheal_post[1]
# This will provide the postseason total
micheal_postseason_total_stats = df_micheal_post[3]
```

Regular Season Stats

Average

In [28]:
```
micheal_full_regular_average_stats = micheal_teams_reg.join(micheal_regular_seas
micheal_full_regular_average_stats['player'] = 3
micheal_regular_season_average = micheal_full_regular_average_stats.rename(colum
micheal_regular_season_average.head()
```

Out[28]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl	p
0	1985	CHI	82	82	38.3	10.2-19.8	51.5	0.1-0.6	17.3	7.7-9.1	...	2.0	4.5	6.5	5.9	0.8	2.4	3.
1	1986	CHI	18	7	25.1	8.3-18.2	45.7	0.2-1.0	16.7	5.8-6.9	...	1.3	2.3	3.6	2.9	1.2	2.1	2.
2	1987	CHI	82	82	40.0	13.4-27.8	48.2	0.1-0.8	18.2	10.2-11.9	...	2.0	3.2	5.2	4.6	1.5	2.9	2.
3	1988	CHI	82	82	40.4	13.0-24.4	53.5	0.1-0.6	13.2	8.8-10.5	...	1.7	3.8	5.5	5.9	1.6	3.2	3.
4	1989	CHI	81	81	40.2	11.9-22.2	53.8	0.3-1.2	27.6	8.3-9.8	...	1.8	6.2	8.0	8.0	0.8	2.9	3.

5 rows × 21 columns

Total

In [29]:
```
micheal_full_regular_total_stats = micheal_teams_reg.join(micheal_regular_season
micheal_full_regular_total_stats['player'] = 3
micheal_regular_season_total = micheal_full_regular_total_stats.rename(columns=s
micheal_regular_season_total.head()
```

Out[29]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	to
0	1985	CHI	837-1625	51.5	9-52	17.3	630-746	84.4	167	367	534	481	69	196	285	291
1	1986	CHI	150-328	45.7	3-18	16.7	105-125	84.0	23	41	64	53	21	37	46	45
2	1987	CHI	1098-2279	48.2	12-66	18.2	833-972	85.7	166	264	430	377	125	236	237	272
3	1988	CHI	1069-1998	53.5	7-53	13.2	723-860	84.1	139	310	449	485	131	259	270	252
4	1989	CHI	966-1795	53.8	27-98	27.6	674-793	85.0	149	503	652	650	65	234	247	290

Postseason Stats

Average

In [30]:
```
micheal_postseason_average_stats.head()
```

Out[30]:

	GP	GS	MIN	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO
0	4	4	42.8	8.5-19.5	43.6	0.3-2.0	12.5	12.0-14.5	82.8	1.8	4.0	5.8	8.5	1.0	2.8	3.8	3.8
1	3	3	45.0	16.0-31.7	50.5	0.3-0.3	100.0	11.3-13.0	87.2	1.7	4.7	6.3	5.7	1.3	2.3	4.3	4.7
2	3	3	42.7	11.7-28.0	41.7	0.7-1.7	40.0	11.7-13.0	89.7	2.3	4.7	7.0	6.0	2.3	2.0	3.7	2.7
3	10	10	42.7	13.8-26.0	53.1	0.1-0.3	33.3	8.6-9.9	86.9	2.3	4.8	7.1	4.7	1.1	2.4	3.8	3.9
4	17	17	42.2	11.7-22.9	51.0	0.6-2.1	28.6	10.8-13.5	79.9	1.5	5.5	7.0	7.6	0.8	2.5	3.8	4.0

In [31]:
```
micheal_full_postseason_average_stats = micheal_teams_post.join(micheal_postseas
micheal_full_postseason_average_stats['player'] = 3
micheal_postseason_average = micheal_full_postseason_average_stats.rename(column
micheal_postseason_average.tail()
```

Out[31]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl
9	1994-95	CHI	10	10	42.0	12.0-24.8	48.4	1.1-3.0	36.7	6.4-7.9	...	2.0	4.5	6.5	4.5	1.4	2.3
10	1995-96	CHI	18	18	40.7	10.4-22.6	45.9	1.4-3.4	40.3	8.5-10.4	...	1.7	3.2	4.9	4.1	0.3	1.8
11	1996-97	CHI	19	19	42.3	11.9-26.2	45.6	0.7-3.5	19.4	6.5-7.8	...	2.2	5.7	7.9	4.8	0.9	1.6
12	1997-98	CHI	21	21	41.5	11.6-25.0	46.2	0.6-2.0	30.2	8.6-10.6	...	1.6	3.5	5.1	3.5	0.6	1.5
13	Career	NaN	179	179	41.8	12.2-25.1	48.7	0.8-2.5	33.2	8.2-9.9	...	1.7	4.7	6.4	5.7	0.9	2.1

5 rows × 21 columns

Total

In [32]:
```
micheal_postseason_total_stats.head()
```

Out[32]:

	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	PTS
0	34-78	43.6	1-8	12.5	48-58	82.8	7	16	23	34	4	11	15	15	117
1	48-95	50.5	1-1	100.0	34-39	87.2	5	14	19	17	4	7	13	14	131
2	35-84	41.7	2-5	40.0	35-39	89.7	7	14	21	18	7	6	11	8	107

	FG	FG%	3PT	3P%	FT	FT%	OR	DR	REB	AST	BLK	STL	PF	TO	PTS
3	138-260	53.1	1-3	33.3	86-99	86.9	23	48	71	47	11	24	38	39	363
4	199-390	51.0	10-35	28.6	183-229	79.9	26	93	119	130	13	42	65	68	591

In [33]:
```
micheal_full_postseason_total_stats = micheal_teams_post.join(micheal_postseason
micheal_full_postseason_total_stats['player'] = 3
micheal_postseason_total = micheal_full_postseason_total_stats.rename(columns=st
micheal_postseason_total.tail()
```

Out[33]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	
9	1994-95	CHI	120-248	48.4	11-30	36.7	64-79	81.0	20	45	65	45	14	23	30	
10	1995-96	CHI	187-407	45.9	25-62	40.3	153-187	81.8	31	58	89	74	6	33	49	
11	1996-97	CHI	227-498	45.6	13-67	19.4	123-148	83.1	42	108	150	91	17	30	46	
12	1997-98	CHI	243-526	46.2	13-43	30.2	181-223	81.2	33	74	107	74	12	32	47	
13	Career	NaN	2188-4497	48.7	148-446	33.2	1463-1766	82.8	305	847	1152	1022	158	376	541	5

Data merging

Now its time to "append" the data together. I should come out with 4 Dataframes.

Regular Season Averages

In [34]:
```
# Combining the 3 player's regular season averages
regular_season_averages = lebron_regular_season_average.append(kobe_regular_seas
                                                               ).append(micheal_r

regular_season_averages.head()
```

Out[34]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl	p
0	2003-04	CLE	79	79	39.5	7.9-18.9	41.7	0.8-2.7	29.0	4.4-5.8	...	1.3	4.2	5.5	5.9	0.7	1.6	1.9
1	2004-05	CLE	80	80	42.4	9.9-21.1	47.2	1.4-3.9	35.1	6.0-8.0	...	1.4	6.0	7.4	7.2	0.7	2.2	1.8
2	2005-06	CLE	79	79	42.5	11.1-23.1	48.0	1.6-4.8	33.5	7.6-10.3	...	0.9	6.1	7.0	6.6	0.8	1.6	2.3
3	2006-07	CLE	78	78	40.9	9.9-20.8	47.6	1.3-4.0	31.9	6.3-9.0	...	1.1	5.7	6.7	6.0	0.7	1.6	2.2
4	2007-08	CLE	75	74	40.4	10.6-21.9	48.4	1.5-4.8	31.5	7.3-10.3	...	1.8	6.1	7.9	7.2	1.1	1.8	2.2

5 rows × 21 columns

Regular Season Totals

In [35]:
```
# Combining the 3 player's regular season totals
regular_season_totals = lebron_regular_season_total.append(kobe_regular_season_t
                                                           ).append(micheal_r
regular_season_totals.tail()
```

Out[35]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	
11	1996-97	CHI	920-1892	48.6	111-297	37.4	480-576	83.3	113	369	482	352	44	140	
12	1997-98	CHI	881-1893	46.5	30-126	23.8	565-721	78.4	130	345	475	283	45	141	
13	2001-02	WSH	551-1324	41.6	10-53	18.9	263-333	79.0	50	289	339	310	26	85	
14	2002-03	WSH	679-1527	44.5	16-55	29.1	266-324	82.1	71	426	497	311	39	123	
15	Career	NaN	12192-24537	49.7	581-1778	32.7	7327-8772	83.5	1668	5004	6672	5633	893	2514	2

Postseason Averages

In [36]:
```
# Combining the 3 player's postseason averages
postseason_averages = lebron_postseason_average.append(kobe_postseason_average
                                                       ).append(micheal_p
postseason_averages.tail()
```

Out[36]:

	season	team	gp	gs	min	fg	fg%	3pt	3p%	ft	...	or	dr	reb	ast	blk	stl
9	1994-95	CHI	10	10	42.0	12.0-24.8	48.4	1.1-3.0	36.7	6.4-7.9	...	2.0	4.5	6.5	4.5	1.4	2.3
10	1995-96	CHI	18	18	40.7	10.4-22.6	45.9	1.4-3.4	40.3	8.5-10.4	...	1.7	3.2	4.9	4.1	0.3	1.8
11	1996-97	CHI	19	19	42.3	11.9-26.2	45.6	0.7-3.5	19.4	6.5-7.8	...	2.2	5.7	7.9	4.8	0.9	1.6
12	1997-98	CHI	21	21	41.5	11.6-25.0	46.2	0.6-2.0	30.2	8.6-10.6	...	1.6	3.5	5.1	3.5	0.6	1.5
13	Career	NaN	179	179	41.8	12.2-25.1	48.7	0.8-2.5	33.2	8.2-9.9	...	1.7	4.7	6.4	5.7	0.9	2.1

5 rows × 21 columns

Postseason Totals

In [37]:
```
# Combining the 3 player's postseason totals
postseason_totals = lebron_postseason_total.append(kobe_postseason_total
                                                   ).append(micheal_p
postseason_totals.tail()
```

Out[37]:

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf

	season	team	fg	fg%	3pt	3p%	ft	ft%	or	dr	reb	ast	blk	stl	pf	
9	1994-95	CHI	120-248	48.4	11-30	36.7	64-79	81.0	20	45	65	45	14	23	30	
10	1995-96	CHI	187-407	45.9	25-62	40.3	153-187	81.8	31	58	89	74	6	33	49	
11	1996-97	CHI	227-498	45.6	13-67	19.4	123-148	83.1	42	108	150	91	17	30	46	
12	1997-98	CHI	243-526	46.2	13-43	30.2	181-223	81.2	33	74	107	74	12	32	47	
13	Career	NaN	2188-4497	48.7	148-446	33.2	1463-1766	82.8	305	847	1152	1022	158	376	541	5

Converting into CSV

Now its time convert the 4 dataframes into csv format

In [ ]:
```
# regular season data
regular_season_averages.to_csv(r'./regular_season_averages.csv', index = False)
regular_season_totals.to_csv(r'./regular_season_totals.csv', index= False)
```

In [ ]:
```
# postseason data
postseason_averages.to_csv(r'./postseason_averages.csv',index = False)
postseason_totals.to_csv(r'./postseason_totals.csv')
```

All done!