

## PART I - SPECIFIC ASSIGNMENTS

1. Calculate the mean and median number of points scored. (In other words, each row is the amount of points a player scored during a particular season. Calculate the median of these values. The result of this is that we have the median number of points players score each season.)

The mean number of points scored: 492.1306892341375

The median number of points scored: 492.1306892341375

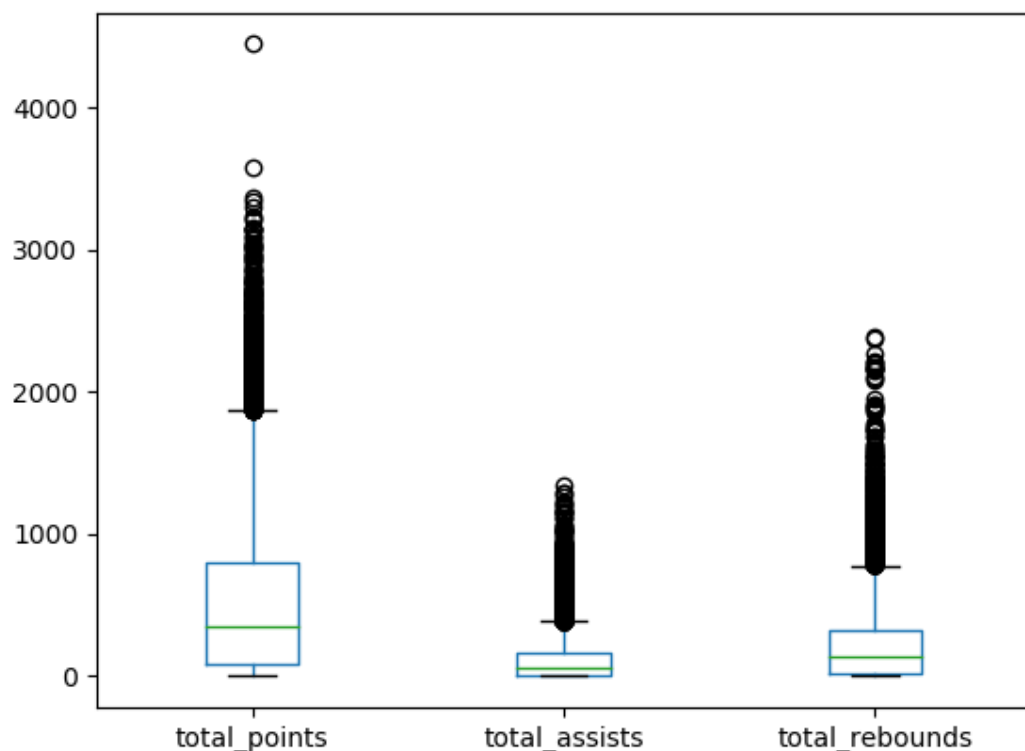
2. Determine the highest number of points recorded in a single season. Identify who scored those points and the year they did so.

The highest number of points: 4029

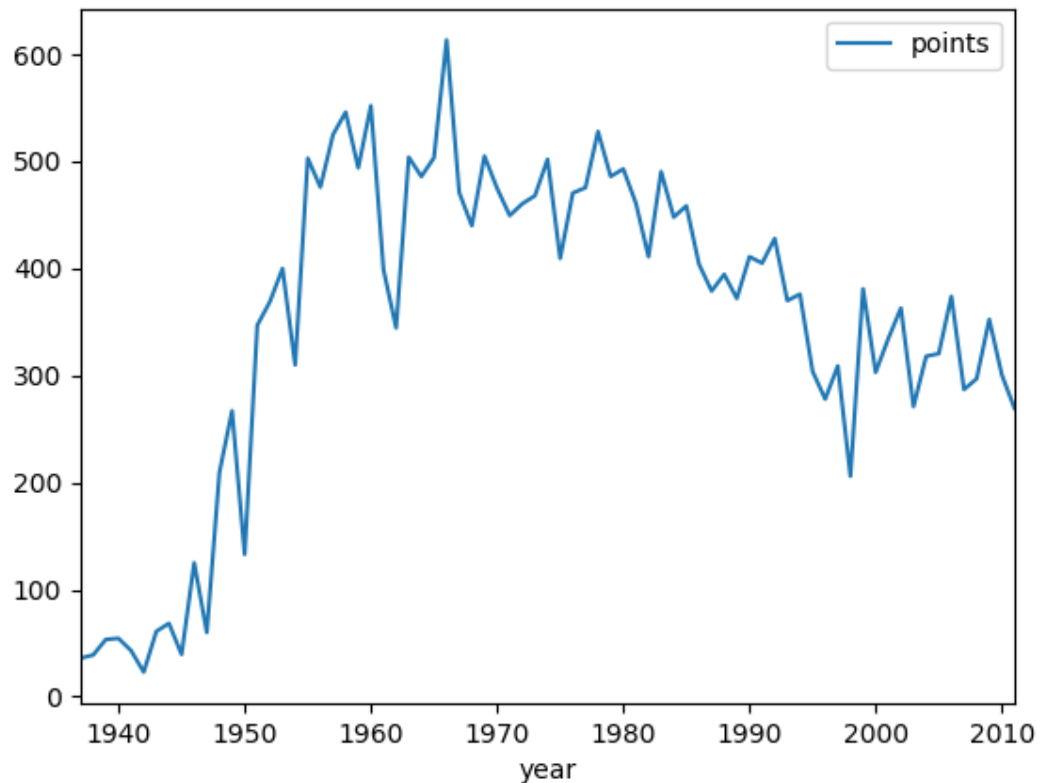
The year of highest number of points:

	points	year	firstName	middleName	lastName	nameSuffix
2078	4029	1961	Wilton	Norman	Chamberlain	NaN

3. Produce a boxplot that shows the distribution of total points, total assists, and total rebounds (each of these three is a separate box plot, but they can be on the same scale and in the same graphic).



4. Produce a plot that shows how the number of points scored has changed over time by showing the median of points scored per year, over time. The x-axis is the year and the y-axis is the median number of points among all players for that year.



## PART II - COME UP WITH SUPPORTING EVIDENCE

1. Some players score a lot of points because they attempt a lot of shots. Among players that have scored a lot of points, are there some that are much more efficient (points per attempt) than others?

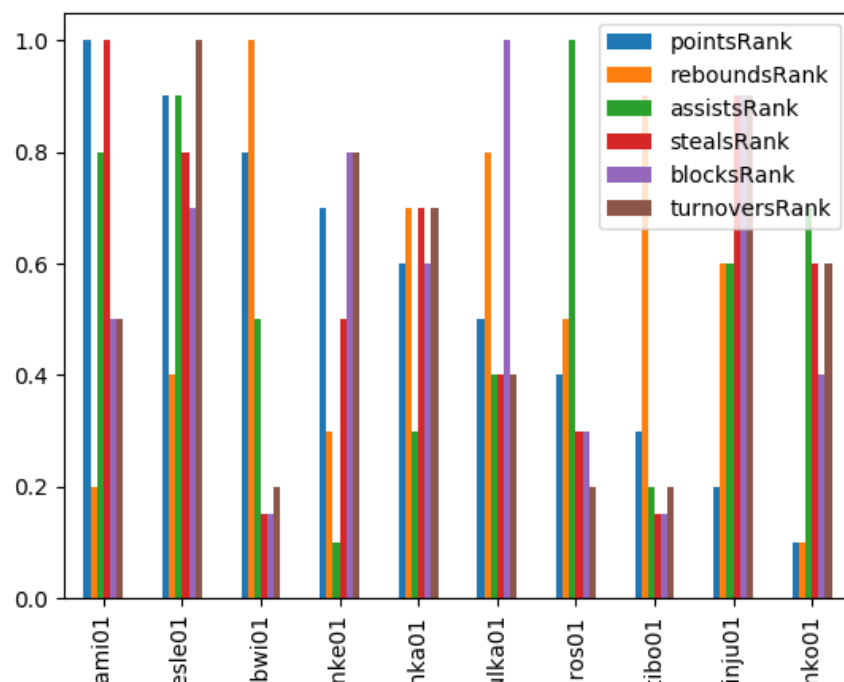
Here is the list of top 10 players who are have higher points per attempt than the other players.

firstName	middleName	lastName	PointsPerAttempt
Norm	NaN	Rosen	11.222222
Robert	J.	Skarda	10.000000
Harry	NaN	Johnson	7.666667
Harold	NaN	Lambert	7.666667
Paul	Wally	Napolitano	7.380952
Ralph	English	Bishop	7.333333

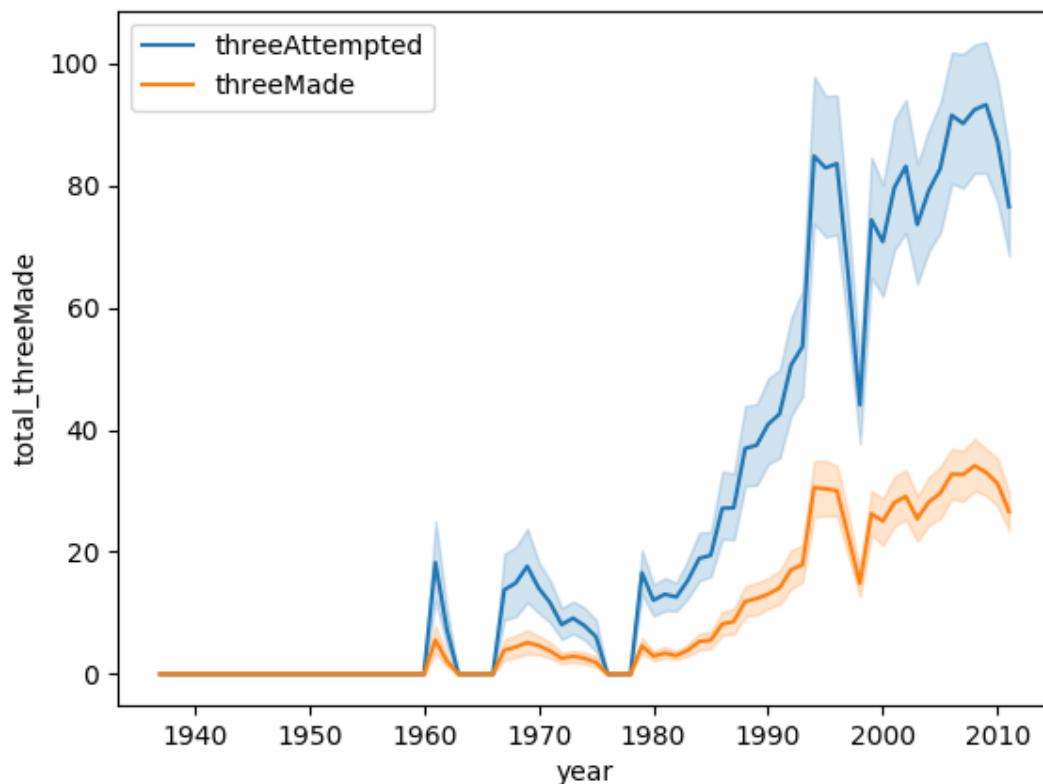
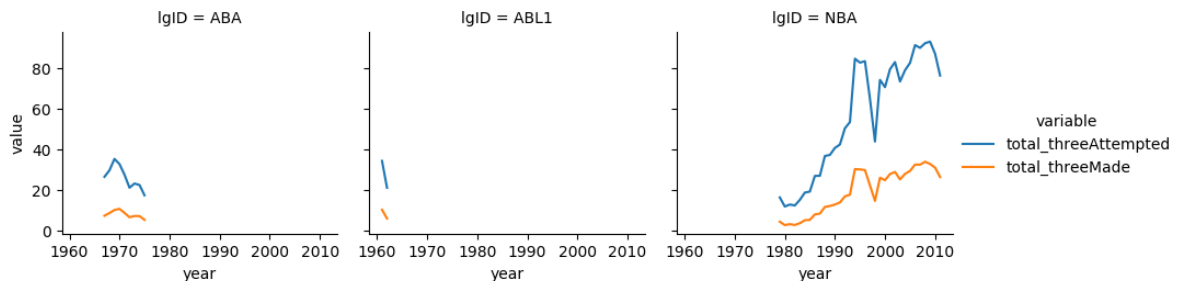
Garland	M.	Head	7.000000
Paul	NaN	Juntunen	6.342105
James	NaN	Goff	6.220779
Frank	E.	Shannon	6.200000

- It seems like some players may excel in one statistical category, but produce very little in other areas. Are there any players that are exceptional across many categories?

firstName	middleName	lastName	nameSuffix
Michael	Jeffrey	Jordan	NaN
LeBron	Raymone	James	NaN
Wilton	Norman	Chamberlain	NaN
Kevin	Wayne	Durant	NaN
Karl	Anthony	Malone	NaN
Kareem	NaN	Abdul-Jabbar	NaN
Oscar	Palmer	Robertson	NaN
Robert	E. Lee	Pettit	Jr.
Julius	Winfield	Erving	II
Kobe	Bean	Bryant	NaN



3. Much has been said about the rise of the three-point shot in recent years. It seems that players are shooting and making more three-point shots than ever. Recognizing that this dataset doesn't contain the very most recent data, do you see a trend of more three-point shots either across the league or among certain groups of players? Is there a point at which popularity increased dramatically?

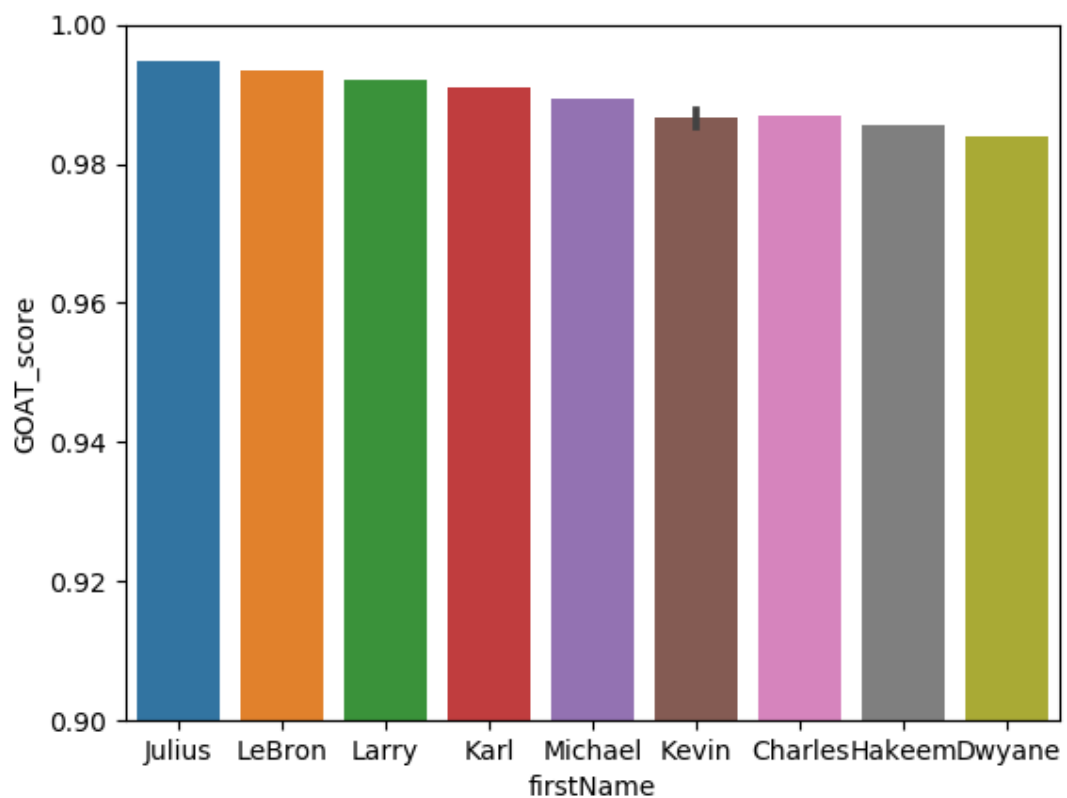


## PART III - SHOW CREATIVITY

1. Many sports analysts argue about which player is the GOAT (the Greatest Of All Time). Based on this data, who would you say is the GOAT? Provide evidence to back up your decision.

I generated GOAT Score which calculates each rank of points, rebounds, assists, steals, blocks, and turnovers for players on percentage format and add them up by allotting a proportion of 50 % to points, and giving 10 % to rest of stats. And here is the list of top 10 players who can be referred as GOAT.

firstName	middleName	lastName	nameSuffix	GOAT_score
Julius	Winfield	Erving	II	0.994758
LeBron	Raymone	James	NaN	0.993310
Larry	Joe	Bird	NaN	0.992046
Karl	Anthony	Malone	NaN	0.990985
Michael	Jeffrey	Jordan	NaN	0.989435
Kevin	Maurice	Garnett	NaN	0.987722
Charles	Wade	Barkley	NaN	0.986896
Hakeem	Abdul	Olajuwon	NaN	0.985458
Kevin	Wayne	Durant	NaN	0.985285
Dwyane	Tyrone	Wade	NaN	0.984010

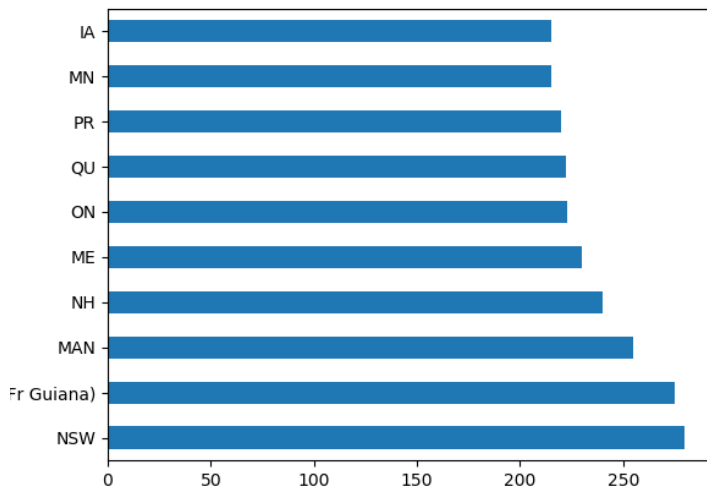
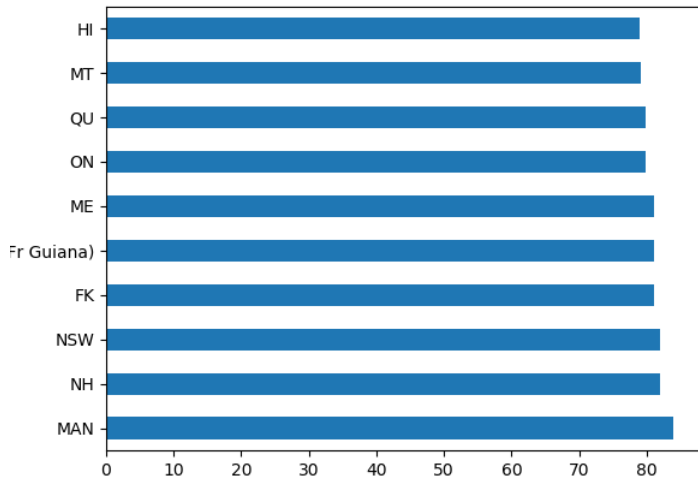


- The biographical data in this dataset contains information about home towns, home states, and home countries for these players. Can you find anything interesting about players who came from a similar location?



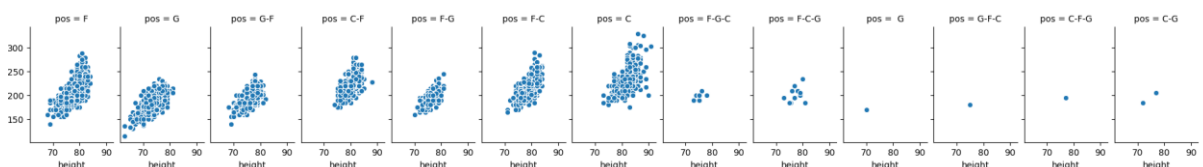
These are bar charts of mean height and weight of players who are from same state.

As you can see, MAN(Maine), NSW(New South Wales), NH(New Hampshire) states shows the high rate of weight and height compared to other states. Here is a closer view of bar charts with top 10 states.



3. Find something else in this dataset that you consider interesting. Produce a graph to communicate your insight.

The correlation between weight and height per position



How much height have been changed over years per position

