What is wrong with the LA Lakers?
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1. Is any one player to blame for the Lakers' poor performance this season? If so, what is that player's problem?

   I will compare the positive statistics (points, minutes, rebounds, assists) between each player on the Lakers for this season, and see who is contributing the most to the team. I will also compare the negative statistics, like turnovers and fouls. This will tell me who is possibly a problematic addition to the Lakers team.

   What is the difference between the Lakers this season and the Lakers when they won the championships two years in a row?

   I will compare the statistics of the Lakers team as a whole from the 2000, 2001, 2002 seasons, 2009, 2010 seasons, and the present season. This will tell me what is different in the Lakers and what they will need to improve on to compete successfully.

2. As a fan of the Los Angeles Lakers, it's disheartening to see the Lakers do so poorly in the regular season, especially with such an impressive starting lineup. It has gotten to the point where it was questionable whether the Lakers would even be able to qualify for the playoffs. The core fanbase have been blaming Pau Gasol for the past couple years. I want to figure out for sure what the problem actually is. I can use previous data from when the Lakers were the best, and compare it to this year's data, and analyze the difference between the two seemingly different teams.

3. Basketball Reference (http://www.basketball-reference.com/teams/LAL/) has downloadable statistics for every team. For the Lakers, the general team statistics go back to 1948 and are up to date with the present time. I can also look up individual players and download their statistics. The website supports CSV format, which is perfect for using the csv.DictReader Python library.

4. The dataset I am using includes almost every statistic I need, including overall team statistics, and individual player statistics like points, points per game, minutes played, etc. Since the dataset is in CSV format, I am able to use the csv.DictReader library to read the data and I can use Matplotlib to graph the data and analyze patterns or sudden shifts. Where there was a dramatic downturn in the Lakers' performance, I can further research that season to see if there were any external factors that contributed to that, such as injuries or personal problems.
   The best way to go about this is to go from general to specific. I will first analyze the overall team's statistics. I will then look for look for periods where the Lakers have lost more than their average win/loss ratio. These results will tell me the problematic years, and I can pay close attention to those and see what the difference is between those years and the championship years.

5. Win/Loss was almost exactly average in 1998 and 2011. I can possibly use the average overall statistics from these seasons as comparison with other seasons. I will first need to test if these are accurate, by seeing if the championship season statistics are higher than these average season statistics. I will also need to throw out average statistics where the difference is too great, which is usually do to drastically different teams.
   An interesting note: In 1998, Kobe and Shaq basically carried the team, with a net stat of 3031/6850 (net stat here is defined by sum of positive statistics and negative statistics). In 2011, there is a nicer distribution of statistics across the team. Kobe, Gasol, and Bynum lead with 5676/9629, with the fourth person closer in this season than in 1998.
   The Lakers won in 1999, 2000, 2001, 2008, and 2009. For my previous hypothesis about the

average statistics to be true, every statistic from these seasons should be near or above the average statistics. I found a few statistics where the average stat was higher than the championship stat. This seems strange, but in actuality, these are percentage stats, and they are within 3% of the average, so it's reasonable to continue using the average statistics as a reference for team performance.
After comparing the current season's statistics to the average statistics, I concluded that the Laker's performance has not dropped below average. A different strategy will be required to see a difference in this season to the championship season. I can try comparing the current season's stats to the average of the championship season stats to increase the chance of seeing a difference.
After comparing these, I realized a problem. Since the season hasn't finished yet, the statistics for this season are incomplete. It isn't fair to compare the iterating statistics (integers) because they still have time to grow. I can, however, compare the percentages. This produces no surprising conclusion, however. The percentages are pretty much the same. It would be better to complete this analysis with full dataset from after this season finishes., which may be soon, as Kobe just got injured and is out indefinitely.
The good part about the work done so far is that I managed to calculate the Lakers' average statistics overall since 1995. These can help analyze their performance in future seasons. I can also compare future seasons to the average championship statistics, and see if they have a chance at winning the championship.

6. First I found the “average season” for Lakers by calculating the average Win/Loss ratio, and seeing which seasons come close to this (from 1995 to 2012). After that, I took these seasons and figured out the average statistics, throwing out those that are too different (where the ratio is not between 0.8 and 1.2).
   Next, I took the seasons where the Lakers won the championship and compared them to the average statistics, to see if the average statistics are accurate. This was done by assuming when the Lakers win, it is because their statistics are above average. This proved successful, meaning my average statistics are appropriate to use to compare with.
   I tried comparing the average statistics to the current season's statistics, looking for stats where the Lakers were doing below average. This concluded that Lakers are not doing below-average this season. So further analysis was required.
   Next I compared the current season with the average of the championship seasons, looking for the same thing as before. From this a problem was produced. The iterating statistics (integers like points, rebounds, steals) were all below-championship-average. This was unfair, as the current year is not over, and these statistics can still increase. The percentages, should stay somewhat the same. These percentages, though, were too close to call a difference.
   It would be better to re-run this analysis after a complete dataset for the current season is available.

7. I am not working with a partner for this assignment.