

## Project Stage 4 - Queries

### English Queries (non trivial)

1. Return a user defined amount of teams and some simple stats (avg ppg, apg, etc) according to Wins
2. Return the coaches that have coached more than 5 seasons with a positive win rate in the playoffs
3. Return the average ppg for a specific team, with the option to return the avg ppg for the league
4. return a user defined amount players and their ppg,apg and spg for the season
  - Group by position and order by height within that position
5. return the team and corresponding coach that won the championship that year
6. list the roster of a team ordered by ppg, should also show apg and spg
  - in case of a tie the tie breaker should be apg, then spg
7. return a user defined amount players ordered by a major category inputted by the User: ppg, apg, spg
8. for a team return the average age of their players
  - maybe extend this to connect with other Queries
    - ex. Maybe we want to see the average age of the top 10 teams by wins
  - Note: this is the age of the player per the end of the season
9. return both teams stats for a specific game
10. list a user defined amount of players in the league for 3 point percentage
  - player must have over a user defined amount of attempts to be included
11. List the players name and PTS in a game that have a height over 6ft 5in and play the position of center
  - Maybe filter by a couple shooting positions that should have high points
12. Return the win % from a home team to another team that's on the visitor side
13. list the coaches who have made it to the 2024-2025 season playoffs and have a overall playoff win % greater than the user input, order coach's from playoff win % from best to worst
14. List all arenas that every team has won at least once.

### Simple Queries to retrieve tables

1. List every player draft combine stats that has attended in any draft combine
2. List all drafts in every season from the drafts table
3. List every coach with their regular game stats and their Playoff game stats
4. List all Arenas in the dataset
5. List all Teams in the dataset
6. List all Games in the dataset
7. List all Players with their Player Information in the Dataset

### justifications

1. this will allow a analyst to quickly see the top performers for the season and the relevant important stats
2. This query will allow a analyst to select the coaches the best in the playoffs
3. This enables a analyst to grab the most important stat from a team while also having the option to compare it's result to the average of the league
4. this is an important query because it allows a analyst to retrieve the primary stats for all players in the league while grouping them according to the role they play in their team

5. less useful for an analyst since they probably already know this but I think it must be a part of a sports database
6. an analyst would find this useful since it allows them to evaluate the most important contributors to a teams scoring
7. allows an analyst to retrieve the leaders of the 3 major statistical categories
8. allows an analyst to evaluate whether a team should start considering rebuilding or push for a championship, while also evaluating a teams future.
9. this query allows an analyst to evaluate individual games and each teams performance
10. This is a fun cool stat but it also allows an analyst to find the best volume 3 point shooters in the league
11. This query allows an analyst to evaluate the performance of centers as well as potentially allow an analyst to see if height is correlated with ppg
12. this query allows an analyst to evaluate how well one team performs against another
13. This query enables analysts to identify the top-performing coaches who have recently reached the NBA playoffs and evaluate their success based on historical playoff performance.
14. This query enables analysts to identify if a certain arena is unbiased towards a certain team winning.

## Note

There will also be simple queries to retrieve individual tables. This will be done to ensure all data remains accessible