Project: Predicting League of Legends Diamond Ranked Games by First 10 Minutes of Gameplay

Target: blueWins
- Class 1: Blue Win
- Class 0: Red Win

Features to inspect:
- blueWardsPlaced
- blueWardsDestroyed
- blueFirstBlood
- blueKills
- blueDeaths
- blueAssists
- blueEliteMonsters
- blueDragons
- blueHeralds
- blueTowersDestroyed
- blueTotalGold
- blueAvgLevel
- blueTotalExperience
- blueTotalMinionsKilled
- blueTotalJungleMinionsKilled
- blueGoldDiff,blueExperienceDiff
- blueCSPerMin
- blueGoldPerMin
- redWardsPlaced
- redWardsDestroyed
- redFirstBlood
- redKills
- redDeaths
- redAssists
- redEliteMonsters
- redDragons
- redHeralds
- redTowersDestroyed
- redTotalGold
- redAvgLevel
- redTotalExperience
- redTotalMinionsKilled
- redTotalJungleMinionsKilled

- redGoldDiff
- redExperienceDiff
- redCSPerMin
- redGoldPerMin

Question/need:

According to the first 10 minutes of gameplay, will the blue team win?
- What is the framing question of your analysis, or the purpose of the model/system you plan to build?
  - In the year 2019, viewership for the "League of Legends" World Championship finals beat numbers for the Superbowl flat, with the esports competition drawing in 100 million viewers across the globe (https://www.cnbc.com/2019/04/14/league-of-legends-gets-more-viewers-than-super-bowlwhats-coming-next.html). Esports and betting on these competitive gaming teams are a huge business, and it is safe to say that many would benefit from understanding what leads to a team win. From this model, we can hope to understand which tactics/experience lead a team to more wins, and then we can use this information to bet on teams which have historically had this experience or used such tactics in their gameplay (ie: this team has many experienced players of this level; this team has historically always went to kill the dragon first).
- Who benefits from exploring this question or building this model/system?
  - Esports betters, journalists covering the championship

Data Description:
- What dataset(s) do you plan to use, and how will you obtain the data?
  - https://www.kaggle.com/datasets/bobbyscience/league-of-legends-diamond-ranked-games-10-min?resource=download
- What is an individual sample/unit of analysis in this project? What characteristics/features do you expect to work with?
  - An individual sample is one game
  - See above for features

Tools:
- How do you intend to meet the tools requirement of the project?
  - Sklearn
  - Seaborn for visualization, maybe tableau if time allows
  - Riot API if time allows for even more features

MVP Goal:
- What would a minimum viable product (MVP) look like for this project?

- Look at just the kaggle dataset, train a kNN model, logistic regression model