**Project report**

**Background**：

Modern young people basically know a game called League of Legends. This is a 5v5 large online strategy against PC game. Players according to the characters they are good at, as well as their positions in the team, show their personal skills and team awareness, and fight in the game map. This is a game that is popular all over the world. Every year there is a global professional league, and the prize money is very high. But there are few mainstream reports about this game, because the mechanics of this game are more complicated. The data we are studying now is the data collected from the professional leagues in other countries except China since 2015.

**Problem statement**：

In this game, it is divided into two camps, red and blue, with bases distributed at both ends of the map. Friends around us always say that it is easier to win in the blue side, and we seem to have this feeling in the game, so we want to observe through the statistics and comparison of the data.

**Approach**:

We are going to import the data first and use the graph to analyze

(1) Compare the winning numbers of the red side and the blue side.

(2) Use the graph to compare the end time of the game when the red and blue sides win.

(3) Comparing the number of gold coins obtained by the red and the blue every minute through data calculation.

(4) Calculate the gold coin data of both teams again, And compare the gold coin acquisition status of each team in the blue and red teams.

(5) Analyze and compare the number of kills of the two teams at each time point.

(6) Analyze and compare the number of destroyed towers of each team at each time point.

**Finding**：

After comparing the data, we found

(1) The number of wins for the blue side is 1987, the red side is 1658, the blue side has 329 more wins than the red side.

(2) The winning time of the blue side is roughly distributed between 20 minutes and 40 minutes.

(3) In the game, the gold coins obtained by red and blue are almost equal.

(4) In the game, the blue jungle got a little more gold than the red jungle.

(5) During the game time of 20 minutes to 30 minutes, Blue has more kills than Red.

(6) During the game time of 20-30 minutes, Blue destroys more towers than Red.

**Conclusion**: