Statistic Process

The first step taken was to create a histogram of the data to see what it looked like. The next step was to then check if the Central Limit Theorem was applicable to my dataset. I checked to see if the cdf for the data lined up well with a normal cdf given the same mean and standard deviation as the sample. The data fit very smoothly along the normal cdf line but it was also necessary to check for other conditions to see if the Central Limit Theorem was useful. Since each match is independent of every other match, it is safe to assume that the average death time of every match are also independent of each other. And since there are a large number of matches in the sample, it is safe to assume that the Central Limit Theorem is indeed correct to use here. Afterwards, I then calculated the margin of error as well as the confidence interval of the data assuming 95 percent confidence on both sides.