This was an individual C++ project for a computer modeling and simulation course in which we were instructed to write a program to model a real world problem of estimating how much money a refrigerator company should set aside in a reserve account with a fixed interest rate to cover the costs of refrigerator repair warranties over a 20 year period. The estimated cost of repairs was based on the number of refrigerators sold in yearly basis based on a Poisson distribution with a mean of 5000, the number of refrigerators currently under warranty (using a 5-year warranty), the number of refrigerators that need to be repaired that are under warranty based on a binomial distribution and the cost of repair for each refrigerator. Once the estimated cost of repairs over the 20-year period is found, then the intial amount of money to set into the reserve account can be determined. Simulations were run with a user-inputted number of samples and at the end give the average total number of refrigerators that need repairs, the average total cost of repairs, and the average amount left in the reserve account, calculated for all samples.