

- 1- Download Java <https://www.java.com/en/download/windows-64bit.jsp> (file size: 73.73 MB)
- 2- Go to settings -> Update & Security -> For developers -> Choose “sideload apps”
- 3- Run the MonteCarlo.exe file
- 4- Enter data in the following fields
 - Demand Text box
 - Days Text box
 - Fill in these two columns (Demand, Frequency)
 - Press enter (from keyboard)
 - Press Simulate button

Model explanation

In general, when faced with significant uncertainty in the process of making an estimation, Monte Carlo method is used to compute this uncertainty.

1. The user enters the data of specific product (the daily demand and how often does this demand occur in days).
2. The program calculates probability of demand occurrence based on the data entered by the user.
3. Hence, this probability is used to compute the cumulative probability. Cumulative probability is the sum of previous probabilities.
4. The core of program lies in this step. Generating an interval of random numbers based on the cumulative probability (e.g. 1 to 5, 5 to 20).
5. The user enters the desired number of days to simulate the average daily demand.
6. Again, the program generates a random number. This number is then mapped in random variable interval and matches it with its daily demand.
7. The results are printed and the average daily demand is computed by taking the sum of simulated daily demand column and dividing by the number of days.