Do the following for various input sizes mentioned in the instructions.

1: Find the running times of all algorithms using the facility available in your programming language for Best, Average and Worst case inputs. You can use random number generator <https://www.random.org/integers/> for this purpose.

2: Plot the running times of all the algorithms for varying input sizes. Run each of your algorithms for the same Best, Average and Worst case input sequence of a particular size. Generate separate plots for each case. You can use the gnuplot tool for this purpose.