

# **Algorithm Profiler**

## **Description**

Algorithm Profiler is a program that empirically analyzes and describes the resource requirements and growth rate of algorithms. To this assignment, you are required to design and implement an algorithm profiler program that takes simple sorting algorithms discussed in class. Your program should analyze each i.e., bubble, selection, and insertion sorting algorithms, empirically, and discuss their behavior. The profiler should consider and determine the performance of each algorithm for its best, average and worst case scenarios. The testing you perform for each algorithm in each case scenario should be plotted and represented with graphs which may be used to visually show the growth rate of the algorithms.

## **Deliverables**

1. A not less than 15 pages of document that describes the assignment work, per the template provided.
2. Source code of the assignment. (Language Independent)

Note:

Assignment is expected to be delivered on or before 14th of August 2023.