

LAB 1

Introduction to MATLAB

- MATLAB is a programming language and interactive environment designed for scientific computing, data analysis, and visualization. MATLAB stands for "matrix laboratory," which reflects its emphasis on matrix and array mathematics.
- MATLAB provides a variety of tools and functions for numerical computation, data analysis, signal processing, image processing, control systems, optimization, and machine learning. It is widely used in academic research, engineering, finance, and other industries where numerical analysis and computation are required.
- MATLAB code is written in a high-level language that is easy to learn and use. The code can be executed interactively in the MATLAB command window or compiled into standalone applications or executables. MATLAB also provides a rich set of visualization tools for creating plots, graphs, and other visual representations of data.
- Overall, MATLAB is a powerful and flexible tool for solving a wide range of numerical problems and analyzing data. Its popularity in academia and industry makes it a valuable skill to have for anyone interested in scientific computing or data analysis.