

# Introduction To IDE



- An integrated development environment (IDE) is a software application that helps programmers develop software code efficiently.
- It increases developer productivity by combining capabilities such as software editing, building, testing, and packaging in an easy-to-use application.
- An IDE typically consists of:
  - **Source code editor:** A text editor that can assist in writing software code with features such as syntax highlighting with visual cues, providing language specific auto-completion, and checking for bugs as code is being written.
  - **Local build automation:** Utilities that automate simple, repeatable tasks as part of creating a local build of the software for use by the developer, like compiling computer source code into binary code, packaging binary code, and running automated tests.
  - **Debugger:** A program for testing other programs that can graphically display the location of a bug in the original code.

- Colab is a free Jupyter notebook environment that runs entirely in the cloud.
- it does not require a setup and the notebooks that you create can be simultaneously edited by your team members - just the way you edit documents in Google Docs.
- Colab supports many popular machine learning / data analytics libraries which can be easily loaded in your notebook.
- Google collab can be access via [link](#)

- Visual Studio Code is a code editor redefined and optimized for building and debugging modern web and cloud applications.
- Visual Studio Code provides seamless integration with python, java , perl and other programming language
- Visual Studio Code can be downloaded via [link](#)