

Experiment No: 1

Study of various AI Tools

AIM:

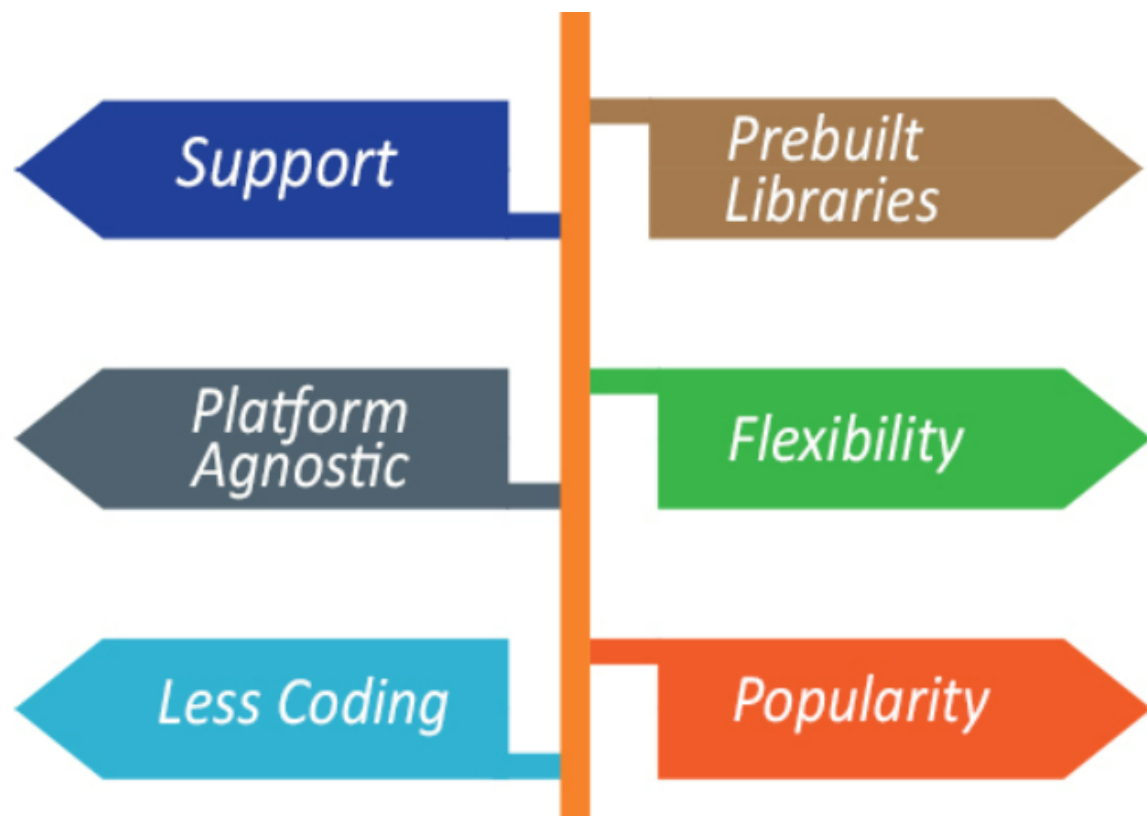
Study, Installation and working of different AI tools.

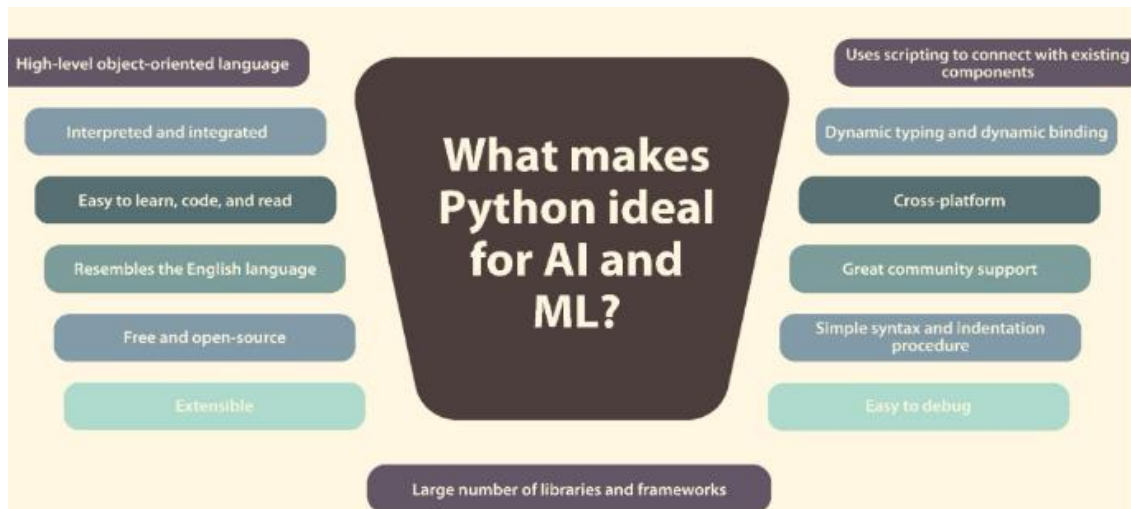
DISCRIPTION:

Python

Python is an Interpreted language which in lay man's terms means that it does not need to be compiled into machine language instruction before execution and can be used by the developer directly to run the program.

Reason for using AI with Python





Installation of Python

```
sudo apt-get install python3
```

R

R is a programming language for Statistical analysis, reporting, and for graphical representation. R is open Source.

Advantages of R:

Open Source

Platform independent

Plots and Graphs: Through ggplot and plotly, R creates attractive graphs with notations and formulas.

MATLAB

MATLAB is the best tool for numeric computation, complex calculation or for dealing with huge data set. MATLAB is a commercial tool, therefore, it is not open-source.

Advantages of MATLAB:

- MATLAB provides a greater visualization of plots or data among other programming languages.
- MATLAB gives results faster than other programming languages when it comes to numeric calculation or analysis.

NLTK-Natural Language Toolkit

NLTK is a toolkit built for working with NLP in Python. It provides us various text processing libraries with a lot of test datasets. A variety of tasks can be performed using NLTK such as tokenizing, parse tree visualization, etc...

GATE

Python GateNLP is a natural language processing (NLP) and text processing framework implemented in Python.

Install GateNLP with all optional dependencies:

```
pip install -U gatenlp[all]
```

Installation

We can install of the above

- 1)Normal pip
- 2)using Conda-Anaconda distribution.