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Python basics:

Features of Python:

1. Simplicity:
The syntax is very simple almost similar to english

2. Builtin libraries support:
adding 2 complex numbers
in c/java: language min 15-20 lines
in python: 3-4 lines

3. No pre-requisites:

4. Emerging areas applications support
- Robotics
- IOT
- AI
- ML
- Computer vision
- Data science
- Natural Language Processing

5. Web applications
   GUI Applications
   Mobile application

6. Reduces the programmer's work
example:
Factorial
c/java: min 10-12 lines
in python we can math module and simply we will call factorial in one line

Environments:
1. Python IDLE
2. PyCharm
3. Jupyter notebook
4. spyder
5. visual studio code
6. Google colab- cloud based
            Central Processing Unit
            GPU: Graphical Processing Unit
            TPU: Tensor Processing Unit

Python applications:

1 .py

2 .ipynb- interactive python notebook

        write source code

        write documentation

        output in same notebook

        we will get visualizations

                bar chart

                graph

                pie chart etc..