

Introduction to Python

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Why Python?

- ✓ Open-Sourced and Free for All
- ✓ Easy to Learn and Use
- ✓ Mature and Supportive Python Community
- ✓ Hundreds of Python Libraries and Frameworks
- ✓ Big data, Machine Learning and Cloud Computing
- ✓ First-choice Language for Academics and Industries
- ✓ Versatility, Efficiency, Reliability, and Speed

Libraries/Frameworks to Ease Our Life



...and 100+ more!!

Python Programming?

```
#include <stdio.h>

int main() {
    printf("Hello World");
    return 0;
}
```

```
#include <iostream>

int main() {
    std::cout << "Hello World";
    return 0;
}
```

```
namespace HelloWorld
{
    class Hello {
        static void Main(string[] args)
        {
            System.Console.WriteLine("Hello World");
        }
    }
}
```

```
class HelloWorld {
    public static void main(String[] args) {
        System.out.println("Hello World");
    }
}
```

```
Python
print("Hello World")
```

Python is a
high-level,
interpreter,
programming
language

Python Integrated Development Environments



colab



Visual Studio Code

Before getting started...

Anaconda and Miniconda are a great platform to manage your coding environment.



Before getting started...

Today, you will be learning:

- Python basics
 - Data types, Array, Loop, Conditionals, Functions etc.
- Some simple exercises
- Introduce some libraries
 - e.g., NumPy, Pandas, Matplotlib etc.