

What is python?

- Python is a simple, general purpose, interpreted, high level and object-oriented programming language.
- Python is developed by Guido Van Rossum.
- Guido Van Rossum started implementing python in 1989, and released in 1991.

Python Features

1. Easy to Learn and Use
2. Interpreted Language
3. Free and Open Source
4. Expressive Language - Means understandable and readable
5. Object Oriented - is a method of structuring a program by bundling related properties and behaviors into individual objects
6. Cross-Platform Language
7. Extensible
8. Integrated - Python is also an Integrated language because we can easily integrated python with other languages like c, c++, etc.
9. GUI Programming Support
10. Large Standard Library

Python Applications

- Web applications(Google, YouTube, Instagram, Drop Box...etc.)
- Game Development
- GUI based applications
- Data Science
- Scientific Computing
- Multimedia
- Machine Learning
- Artificial Intelligence

Platforms to run Python

- IDLE(Integrated Development and Learning Environment), PyCharm(integrated development environment (IDE)), PyScripter(integrated development environment (IDE)), PyDev, Anaconda, Jupyter etc...

Literate Programming

- Is a combination of coding and documentation

Anaconda

- Anaconda is a platform/navigator to run python

Why should we use Anaconda for Python?

- Anaconda is popular because it brings many of the tools used in data science and machine learning.
- Anaconda contains popular python libraries that can be used in data science.

Markdown Format for Documentation

Heading1

Heading2

Heading3

Heading4

Heading5

Heading6

In []:

```
1 **Bold**
```

In []:

```
1 *Italic*
```

- Normal Text
 - sublist1
 - sublist2
 - sublist3

In []:

```
1 1. ordered list element1
2 2. ordered list element2
```

In []:

```
1 a. python1
2
3 b. python2
```

In []:

```
1 I. PYTHON
2
3 II. PYTHON
```

In []:

```
1 # image importing  
2 <img src='img_name.jpg'>
```