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Python: Getting Started

The Python Language

In the early 1990's, Guido van Rossum designed what would become the Python programming language.

- Van Rossum was dissatisfied with the languages available, as they were optimized to write large programs that executed quickly.
- He needed a language that could not only be used to create programs quickly but also make them easy to modify
- It was designed to have a much simpler and cleaner syntax than other popular languages such as Java, C and C++ (making it easier to learn)

Why Use Python?

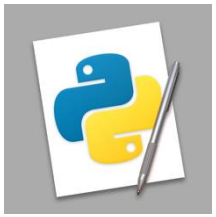
- A concise and simple interpreted programming language
- Extensive Standard Library
- Python Developer Community is very large
  - Meaning there are many new and maintained libraries and plenty of individuals able to offer support
- Open-source
  - Meaning that it is free to use and that all the source files are also freely accessible

Python IDEs

All software development could be performed within simple text editors and compiled/executed from the terminal.

However, using an Integrated Development Environments (IDE) offers language specific tools such as: code completion, syntax highlighting, code analysis, code refactoring, project organisation and management, debugging tools, plugins… and many more!

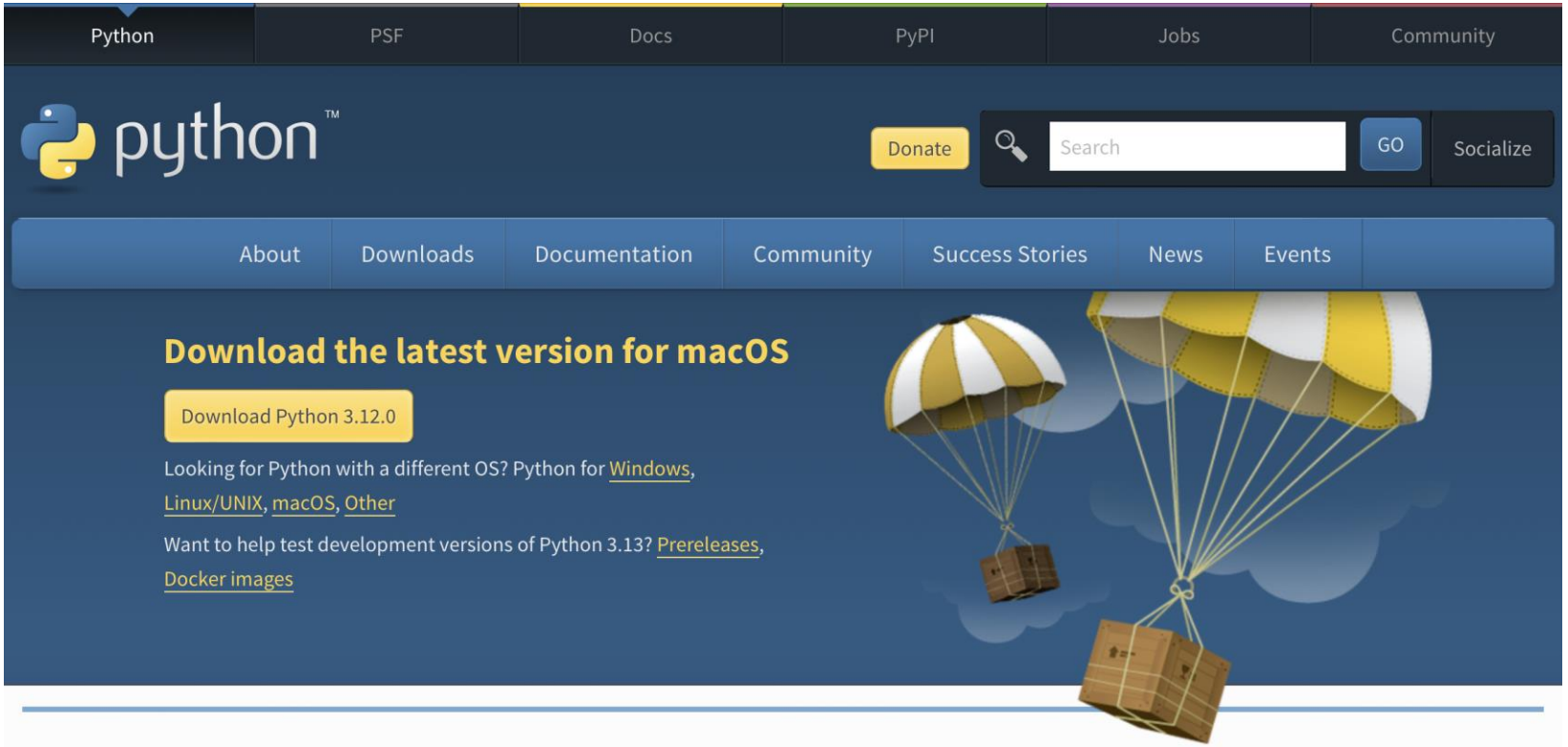
There are many (IDEs) available for Python, find the best for you!


IDLE

Visit is link:

www.python.org/downloads/



IDLE

Run the downloaded file and install IDLE on your device.

After installing IDLE should appear in your list of programs.

It is IDLE itself we want to open, not the Python Launcher.

IDLE Shell

Opening IDLE will launch the IDLE shell.

The shell is where your basic programs will print out any information, as well as where we will input any information as our programs become more complex.

IDLE Shell

The IDLE shell can be a useful tool for performing quick calculations.

Try typing the following lines into the shell and pressing enter after each one:

```
4 + 5
```

```
x = 12
```

```
x * 10
```

IDLE Shell

We are able to create and update variables using the shell, so we can easily perform calculations without needing to write a full program!

We can also run code, try entering the following:

```
print("Hello World!")
```