

# Setup Tips

## Setup Tips for Prerequisites

The following steps can help to set up the environment listed in the [Contribution guide](#)

- A GitHub account.
- A Linux, macOS, or Microsoft Windows development environment
- Java JDK 8 installed
- [Docker](<https://www.docker.com/>) installed for some tasks including building worker containers and testing this website changes locally.
- For SDK Development:
  - [Go](<https://golang.org>) 1.20 or later installed for Go SDK development
  - Python 3.7, and 3.8, and 3.11. Yes, you need all three versions installed.
  - pip, setuptools, virtualenv, and tox installed for Python development
- For large contributions, a signed [Individual Contributor License Agreement](<https://www.apache.org/licenses/icla.pdf>) (ICLA) to the Apache Software Foundation (ASF).

## For MacOS

1. Install Java 8, Go 1.20, `pyenv` and Docker using homebrew.
  - a. Check the following tutorial [How to install Java 8 on Mac](#).
2. Use `pyenv` to install the python versions, 3.7, 3.8, 3.11.
3. Use pip (installed when installing `pyenv`) to install `setuptools`, `virtualenv`, and `tox`.
4. Clone the apache beam project from <https://github.com/apache/beam> using main branch.
  - a. `cd` into the `/beam` root project
5. Execute the following commands:

```
./gradlew projects
```

```
./gradlew tasks
```

6. To make sure Java environment is correctly installed, execute:

```
./gradlew -p sdks/java/io/cassandra check
```

```
./gradlew -p runners/flink check
```

## For Windows

(in construction)

1. <https://github.com/pyenv-win/pyenv-win>