

Installing Apache Maven:

- Install the latest version of Apache Maven. Current version is 3.6.3. The instructions are available here: <https://maven.apache.org/install.html>.
- Do not forget to set the PATH variable. Please verify the installation by running "`mvn -v`". The output should look like this:

```
mayukh@Mayukhs-MacBook-Pro ~ % mvn -v
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: /Users/mayukh/Downloads/installer/apache-maven-3.6.3
Java version: 1.8.0_251, vendor: Oracle Corporation, runtime: /Library/Java/JavaVirtualMachines/jdk1.8.0_251.jdk/Contents/Home/jre
Default locale: en_IN, platform encoding: UTF-8
OS name: "mac os x", version: "10.15.6", arch: "x86_64", family: "mac"
```

Creating the boilerplate Project

Please run the following command for creating a boilerplate project for Apache Flink.

```
mvn archetype:generate \
  -DarchetypeGroupId=org.apache.flink \
  -DarchetypeArtifactId=flink-quickstart-java \
  -DarchetypeVersion=1.11.0 \
    -DgroupId=<group_id> \
    -DartifactId=<artifact/project_name> \
    -Dversion=0.1 \
    -Dpackage=<package> \
    -DinteractiveMode=false
```

Example values for a sample project:

```
mvn archetype:generate \
  -DarchetypeGroupId=org.apache.flink \
  -DarchetypeArtifactId=flink-quickstart-java \
  -DarchetypeVersion=1.11.0 \
    -DgroupId=upgrad \
    -DartifactId=flink-streaming-project \
    -Dversion=0.1 \
    -Dpackage=upgrad \
    -DinteractiveMode=false
```

Import the project into the IDE of your choice and start coding.

After making changes in the code, run "`mvn clean package`" to build the project. This will create a jar file inside the "`targets`" directory. Upload this jar to flink for running the job in the Flink cluster.