**ASSIGNMENT 5 DevOps**

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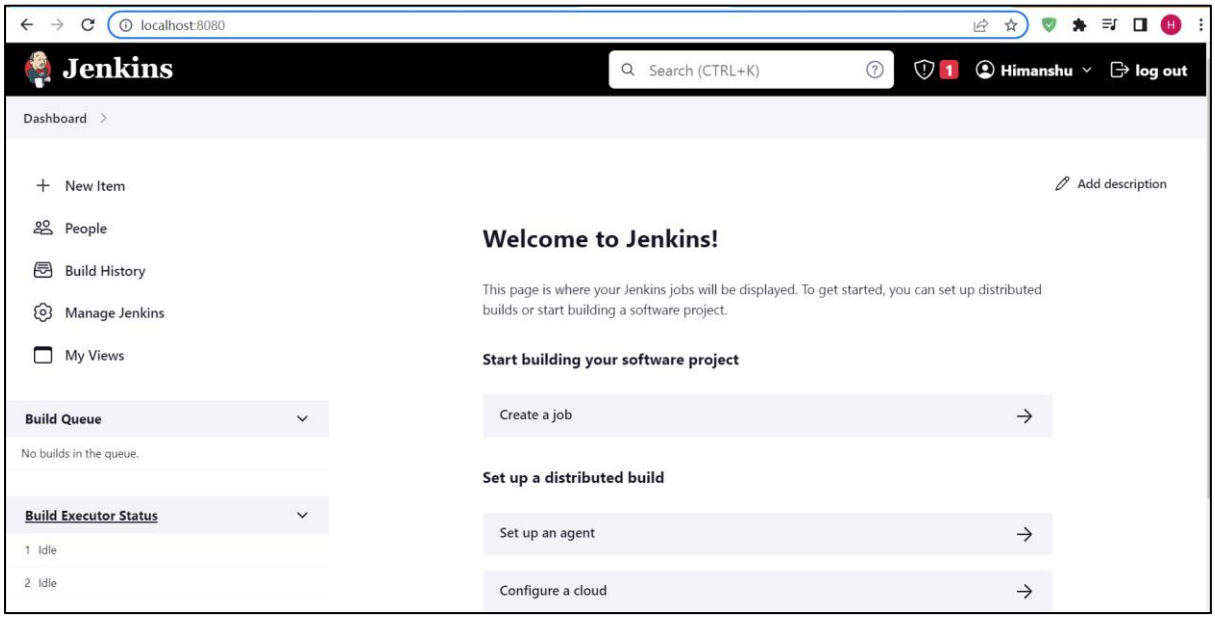
## **1**) Set up a Jenkins job that picks up a Java application from a GitHub repository, builds it, and runs it.

**Prerequisite**: github account, jenkins installed on system(click), jdk 11/17/22(any one)

So lets create and run a job in jenkins for simple java application

1)after Installing the jenkins go to the localhost:8080

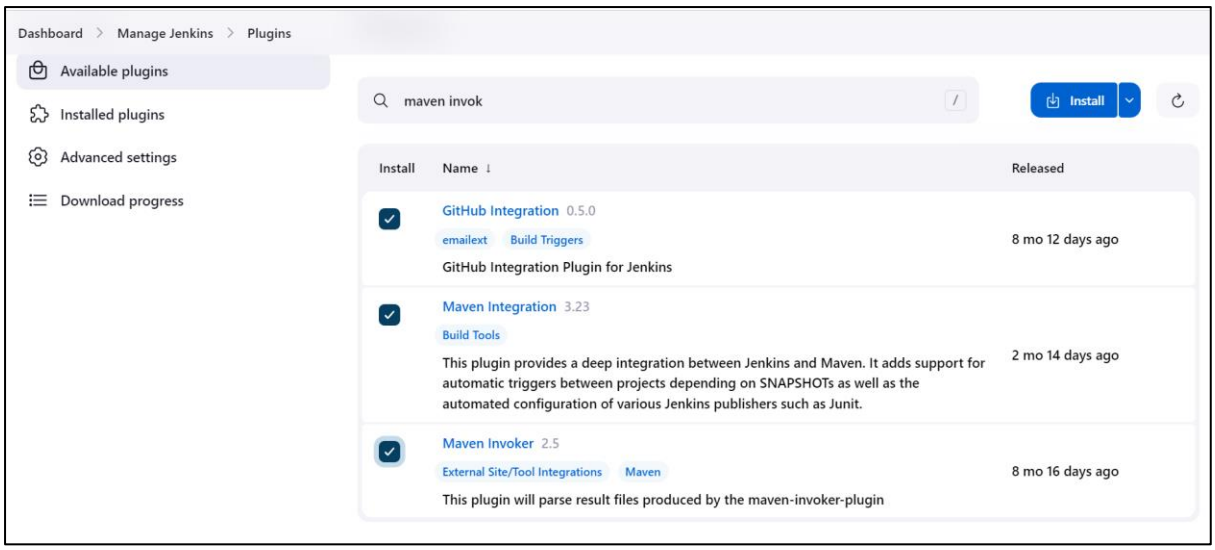



2)Now click on “**manage jenkins”** with setting icon on left side bar then go to “**plugins”** after that click on **“available plugins”** and search for three main plugins

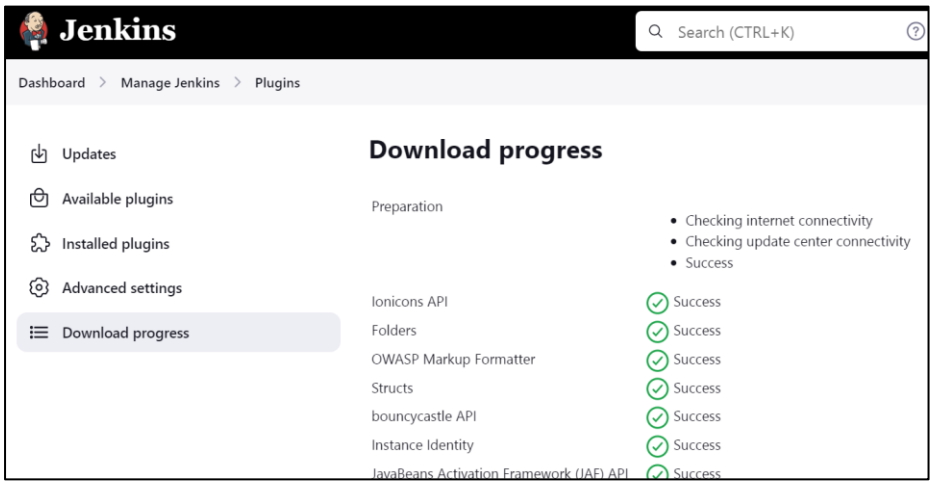
a)github integration plugins

b)maven integration

c)maven invoker,and install all this

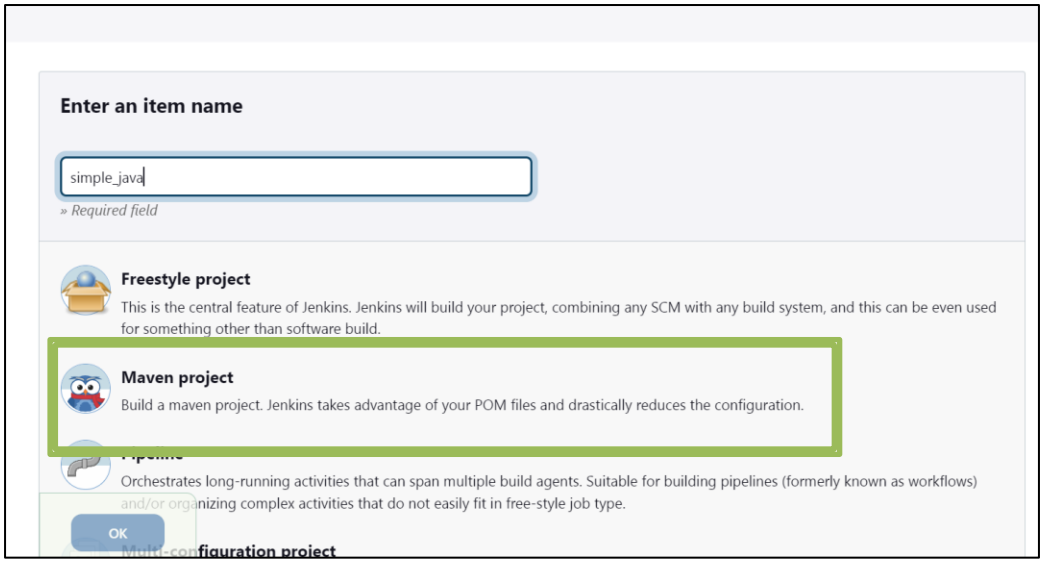



Now all has been installed

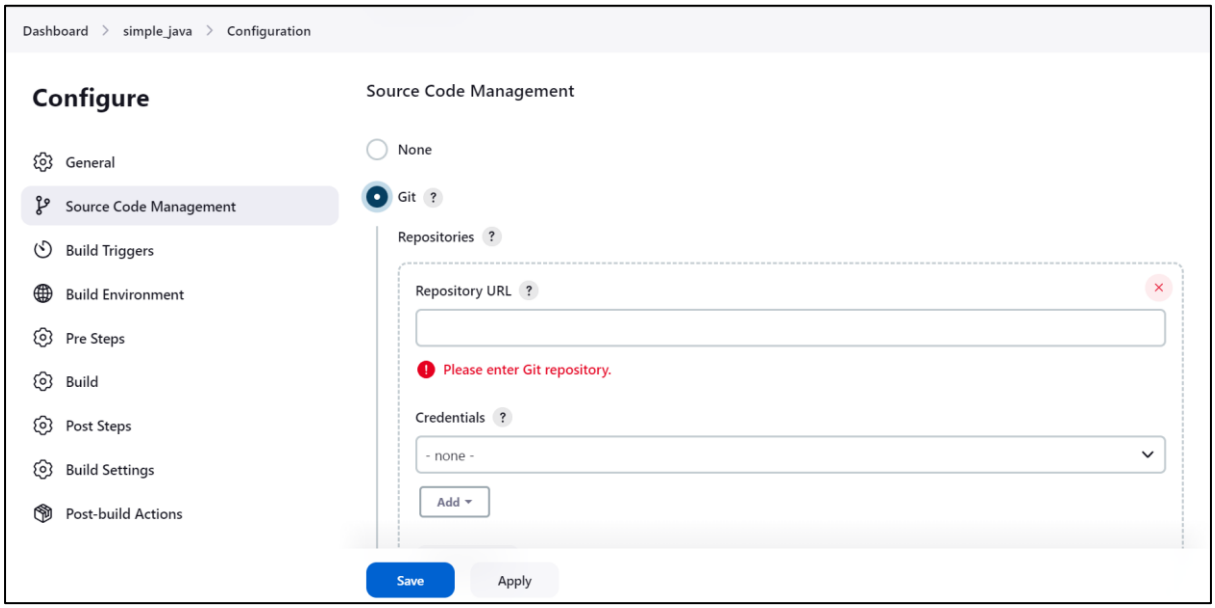



Again go to dashboard click on manage jenkins then click on “tools” and scroll to the bottom under maven installation add maven  the click on save and apply

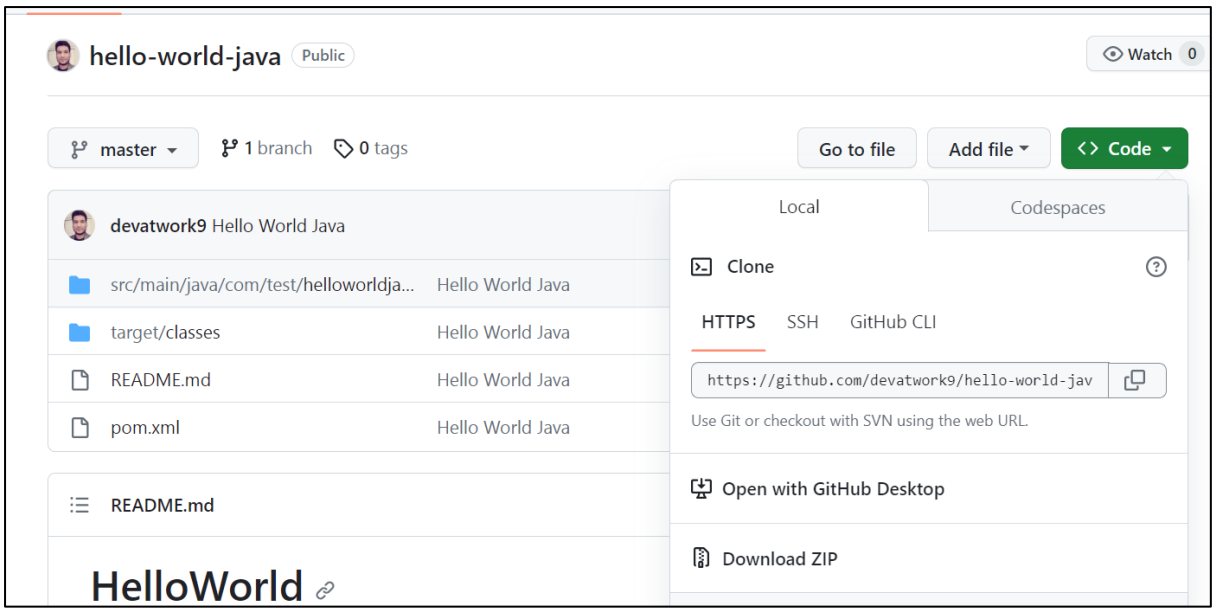
3)go  to dashboard and click on new item and named the job as “simple_java” and click on second option “maven project” then click ok(It is imp to click on maven project)



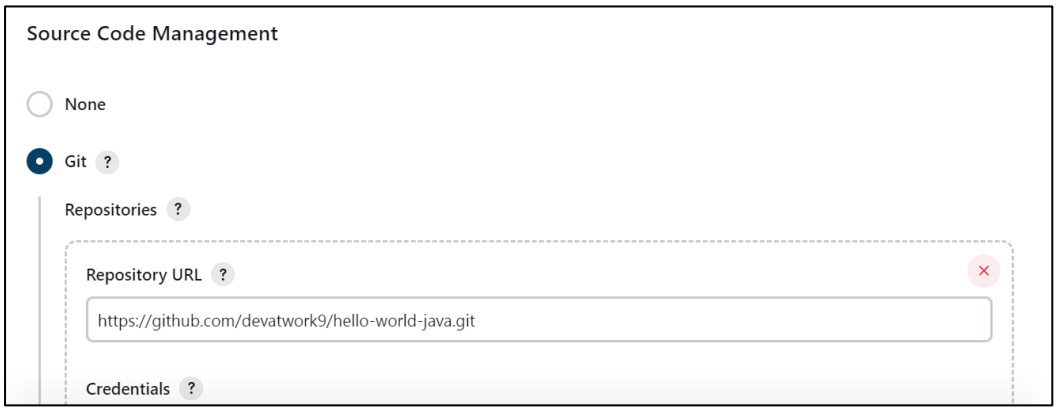

4) now click on source code management and click on git and paste the HTTPS URL of simple java based application from github(the chosen repo of github should to be public and must contain  pom.xml[maven] )

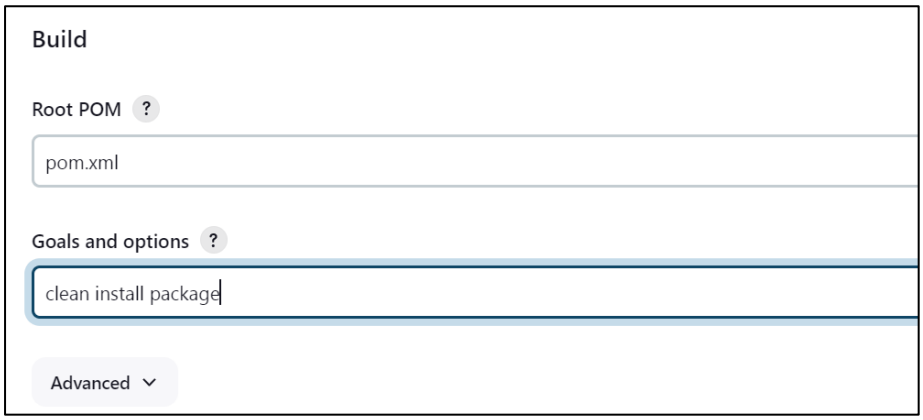



Here below I have chosen a random repo(click) of someone of basic java application of hello world



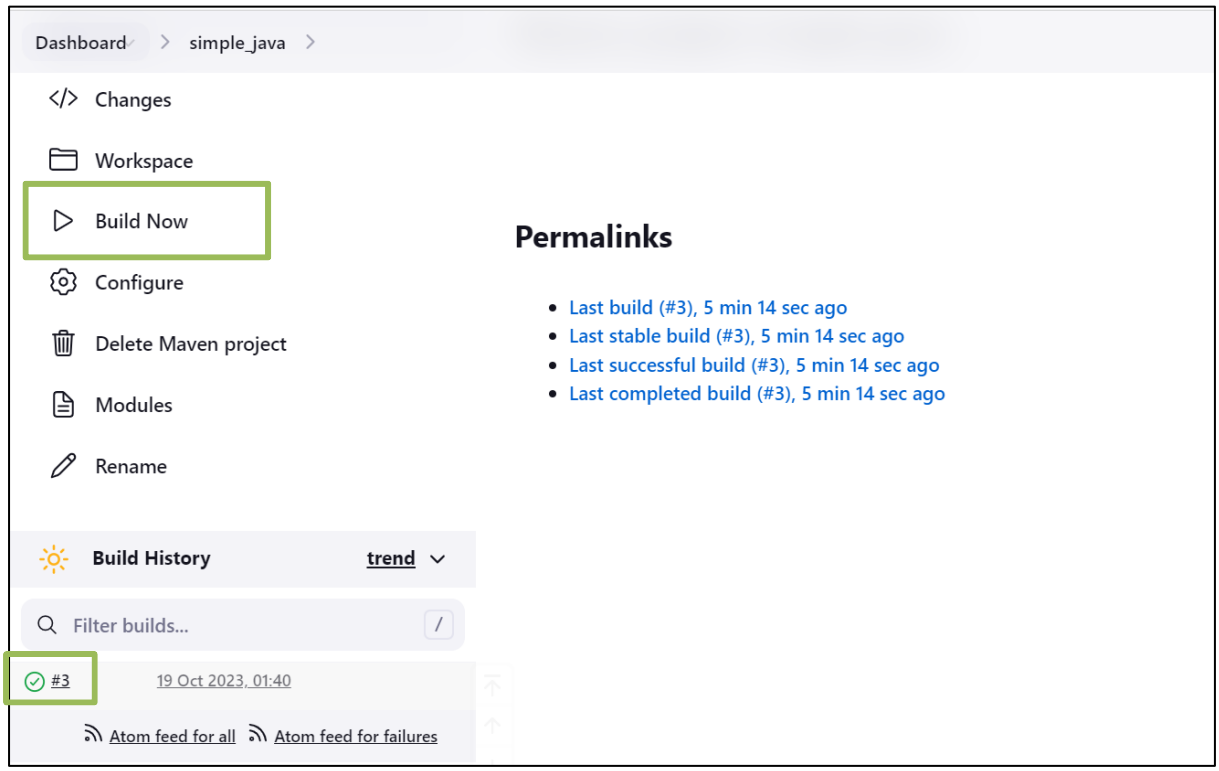

Now just copy the HTTPS url and paste in repository url ,scroll down in build section under goals and action write “clean install package”



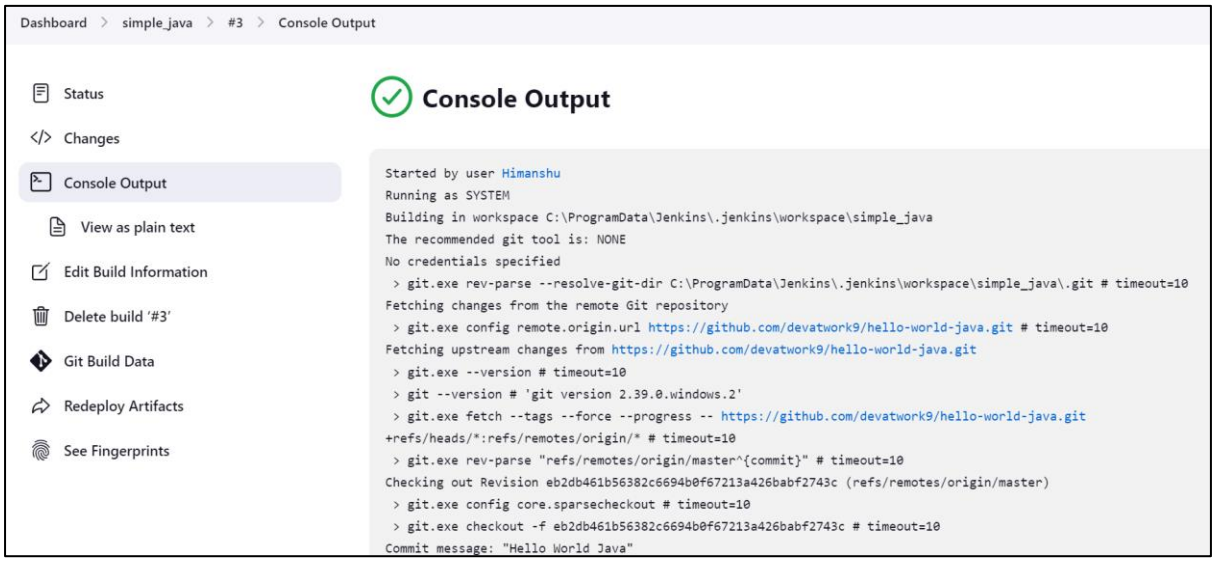




then scroll to bottom and click on save

5)after that click on “build now” from left side bar of main dashboard and  below there will be the build history




6)Now just click on that tick and after that click on output console on left side bar

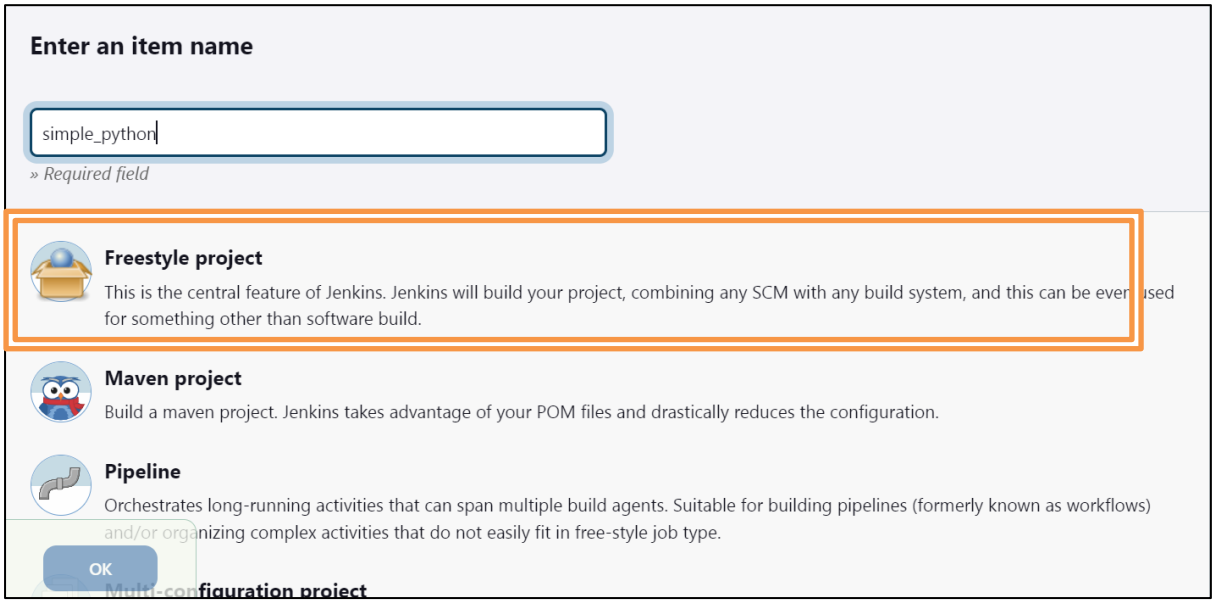



Here the java application of hello world has been build and run using the jenkins job.

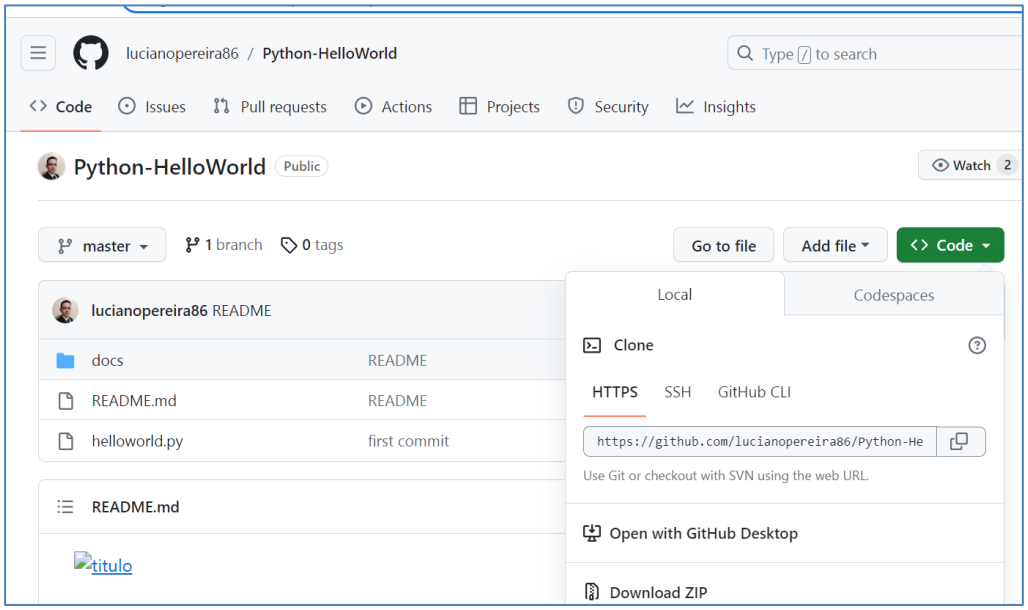
## b) Set up a Jenkins job that picks up a python application from a GitHub repository, builds it, and runs it.

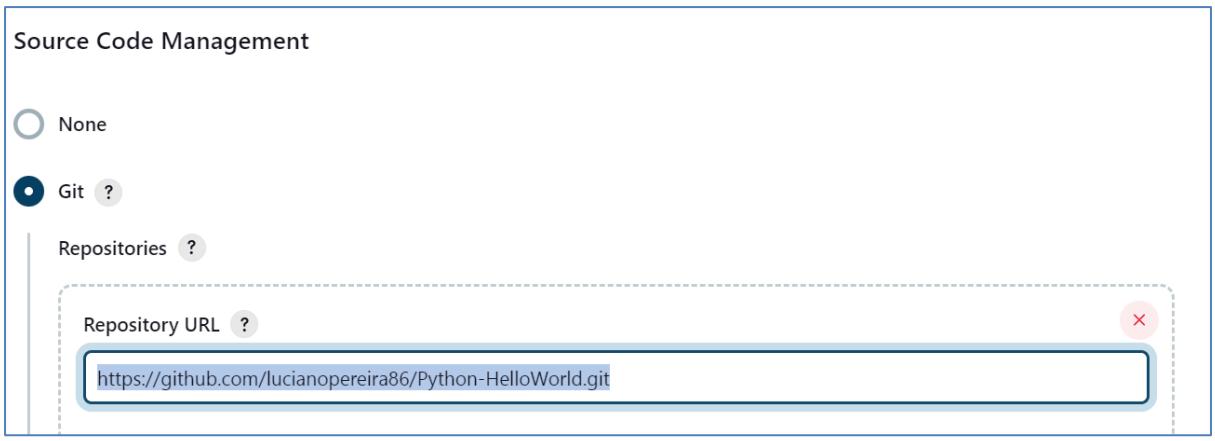
**Before this go to Manage jenkins>Plugins>Available plugins and install python (like we have install other 3 plugin previously for java )**

1)go to dashboard create a new item named simple_python click on freestyle project and click ok

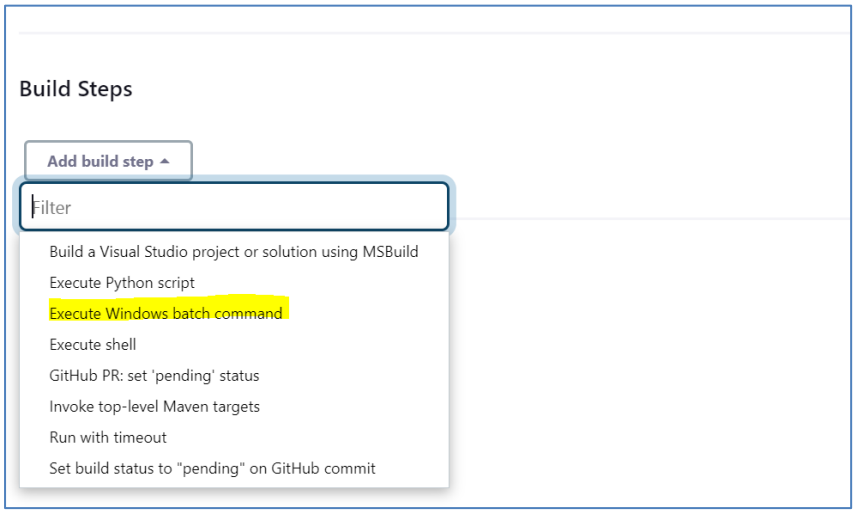



2)now just open a random git repo(click) of simple python program, copy the HTTPS Url and paste it in repository url





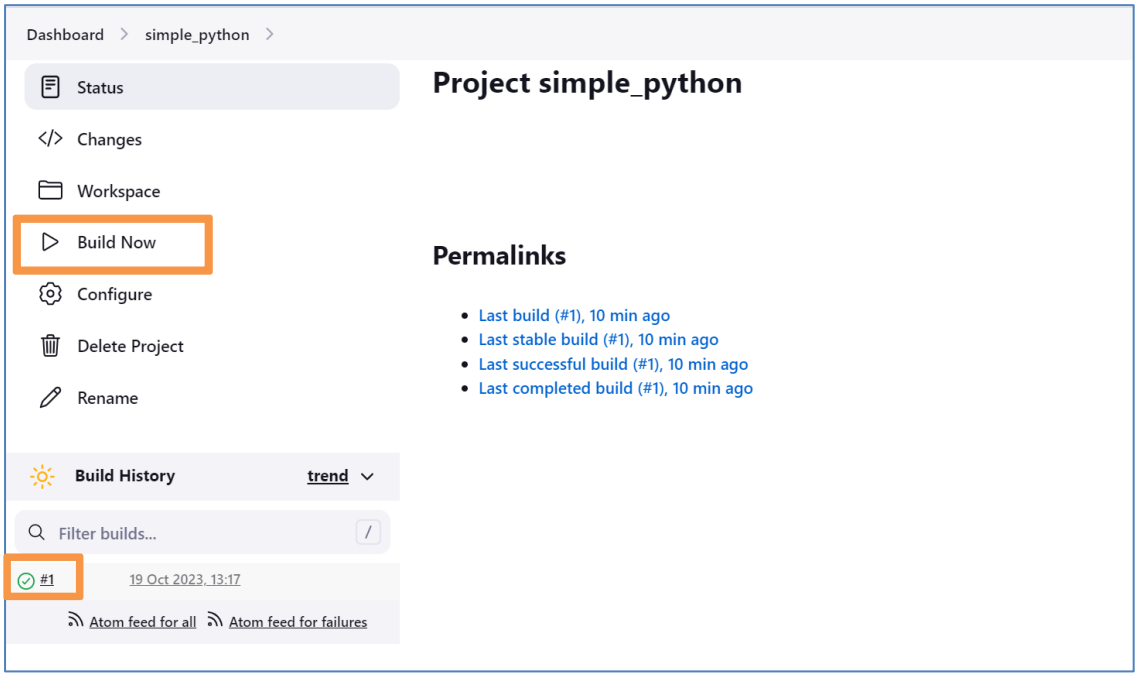

3)Scroll down under build step click on execute window batch command and write this





After this scroll to bottom click on apply and save

4)after this it will redirect you to your created job now just click on “build now”




Just click on green tick it will lead to output console

5) now the python application has been successfully build and runned