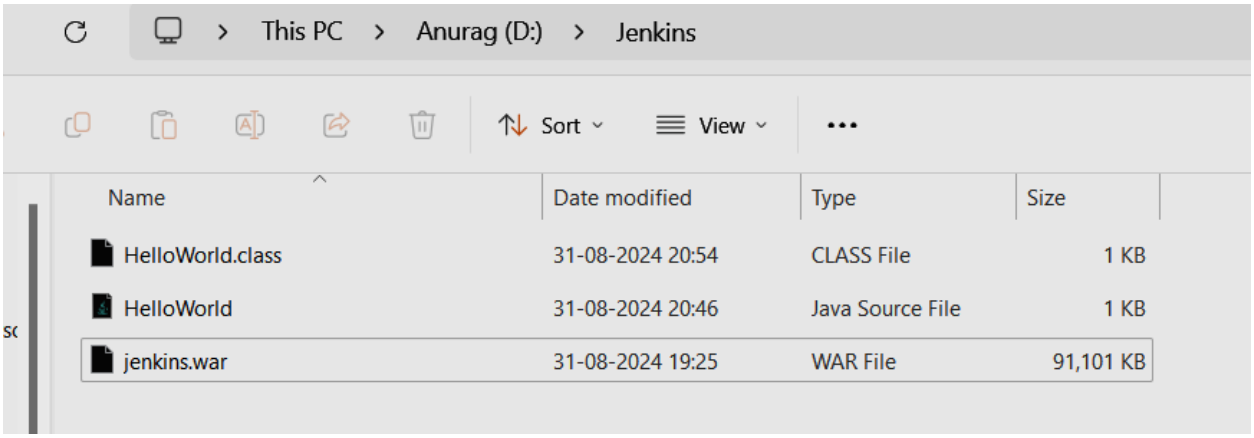
Aim – Executing java sequence programming and integration of GitHub with Jenkins.

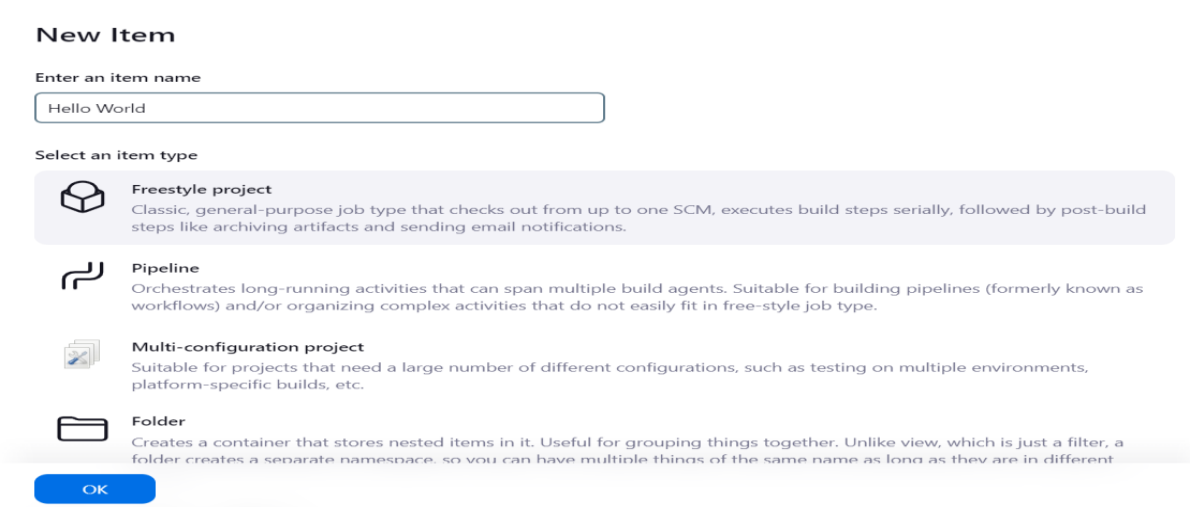
Theory –
Jenkins comes with a pretty basic setup, so you will need to install the required plugins to enable respective third-party application support.
GitHub is a web-based repository of code which plays a major role in DevOps. It provides a common platform for multiple developers working on the same code/project to upload and retrieve updated code, thereby facilitating continuous integration.
Jenkins needs to have GitHub plugin installed to be able to pull code from the GitHub repository.

Steps –

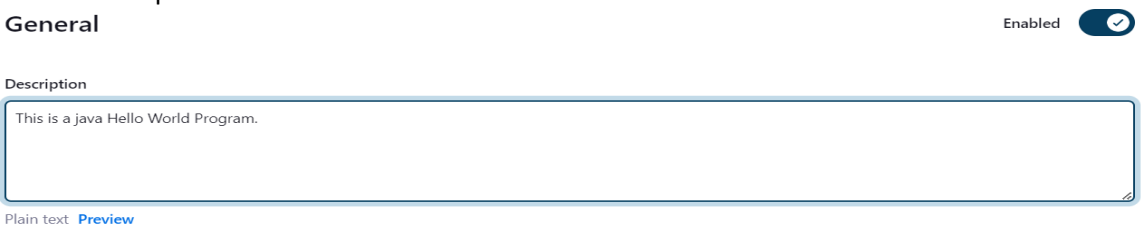
1. Login to Jenkins.
2. Go to your Jenkins folder and create “HelloWorld.java” file.



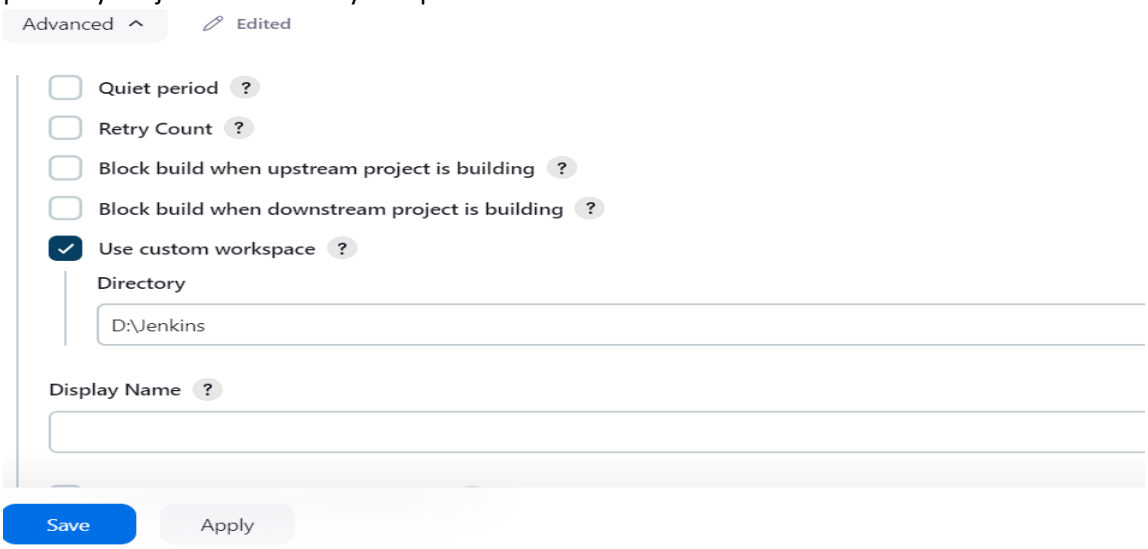
3. In Jenkins Create a Job or Item, Enter item name as Hello World and select “Freestyle Project”.



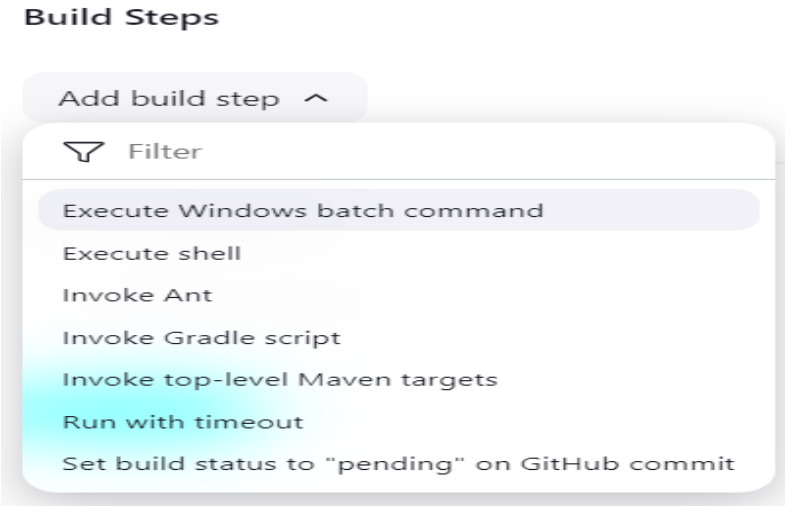
4. Write a description.



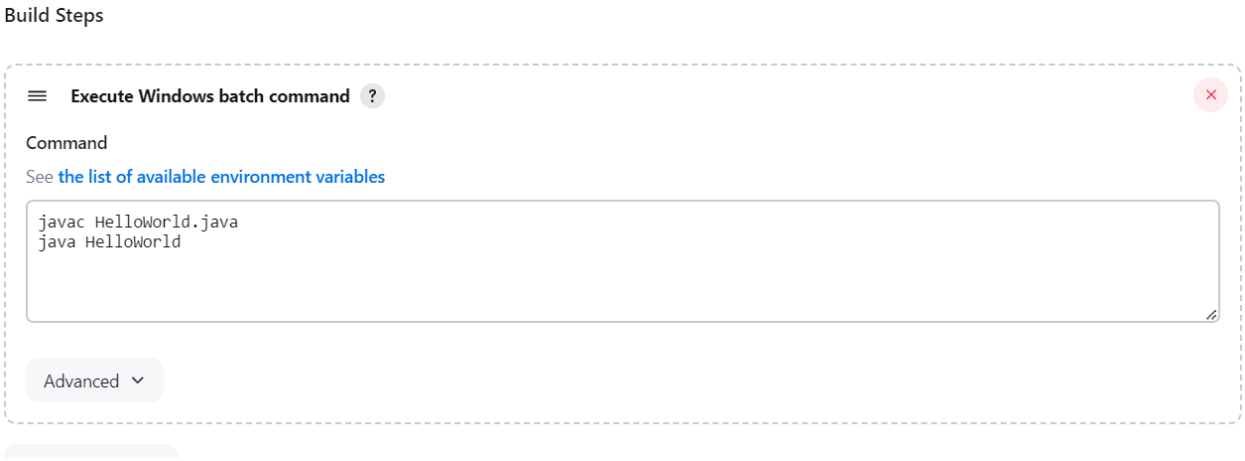
5. Go to advanced tab of “General configure” and select “Use Custom Workspace” and copy the path of your java file directory and paste it here.



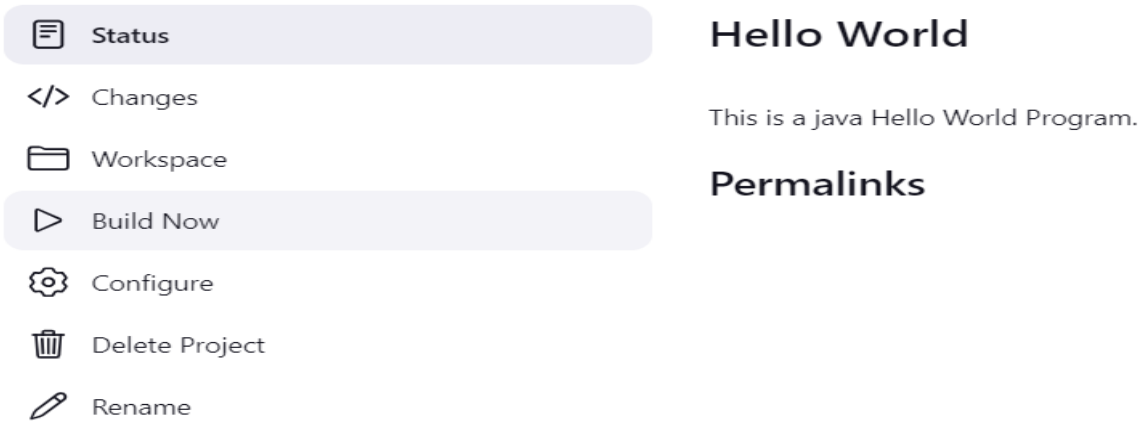
6. Go to “Build Steps” in Configure and add a “Execute Windows Batch Command”.



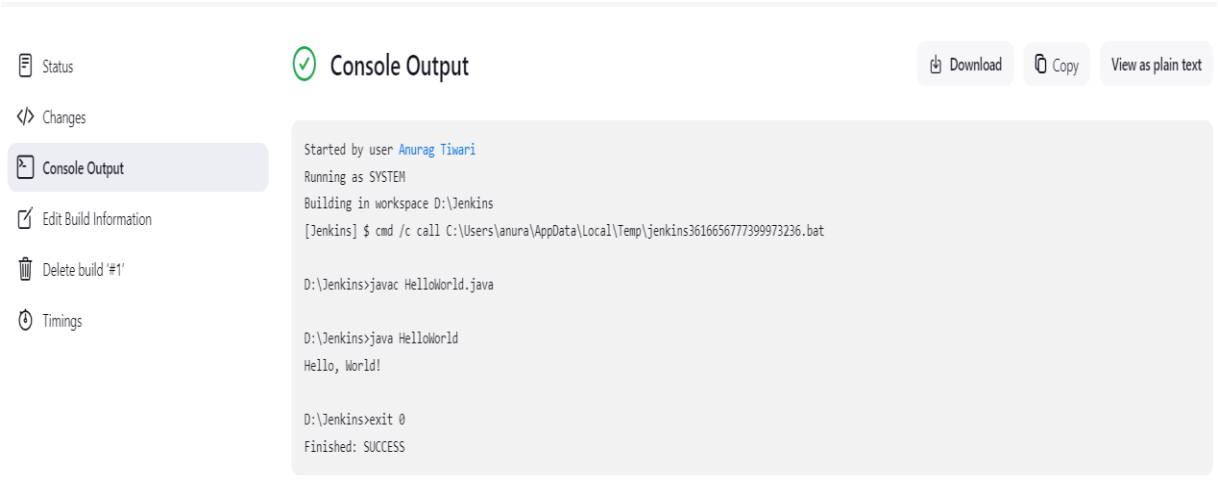
7. In command type “javac HelloWorld.java” and “java HelloWorld” and click Save.



8. A new page opens. Execute “Hello java” by clicking on “Build Now” link. If the job is successful, then it will show Blue ball or Green tick otherwise Red ball under “Build History”.

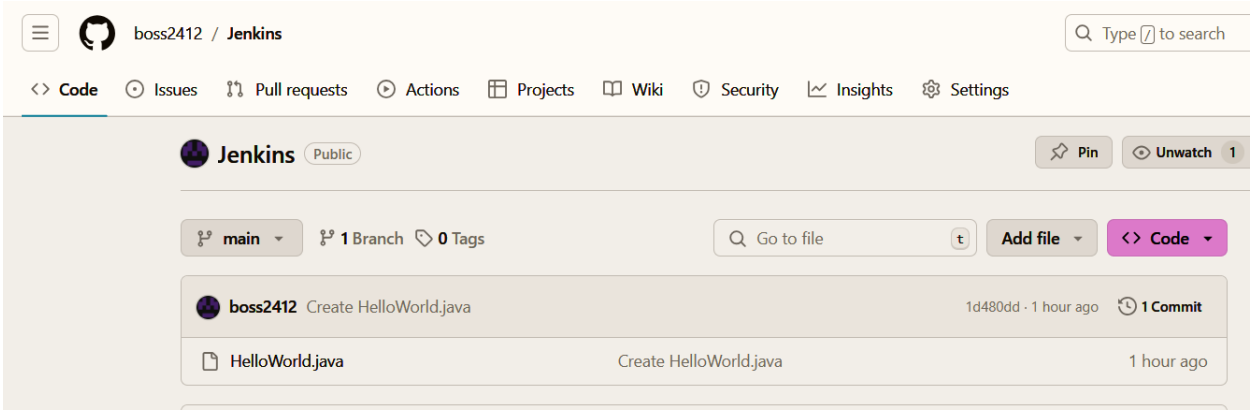


9. In Build History go to “Console Output” to get the output of your build.



Integrate Github with Jenkins Steps –

1. Login to Jenkins.
2. In Jenkins Create a Job or Item, Enter item name as Hello and select “Freestyle Project”.
3. Write a description.
4. Create a New Repository in Github and create “HelloWorld.java” file in it containing the code.



5. Go to “Source Code Management” and select “Git” option.

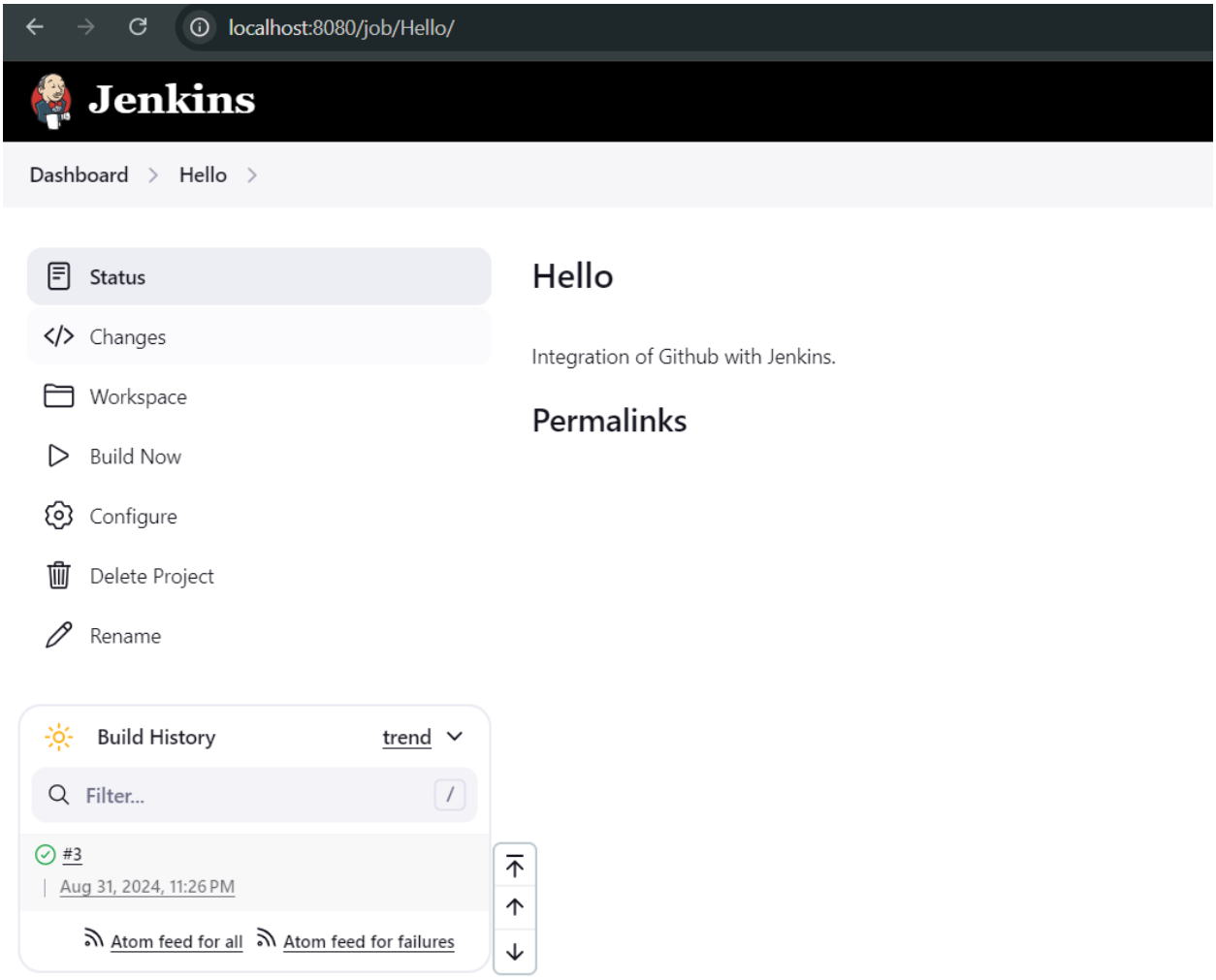
6. In Repository URL, paste the URL of the newly created repository and select the branch to build from your repository.

7. Go to “Build Steps” in Configure and add a “Execute Windows Batch Command”.

8. In command type “javac HelloWorld.java” and “java HelloWorld” and click Save.

9. A new page opens. Execute “Hello java” by clicking on “Build Now” link. If the job is successful, then it will show Blue ball or Green tick otherwise Red ball under “Build History”.

10. In Build History go to “Console Output” to get the output of your build.



Conclusion –

Hence, successfully executed java sequence program and integrated GitHub with Jenkins.