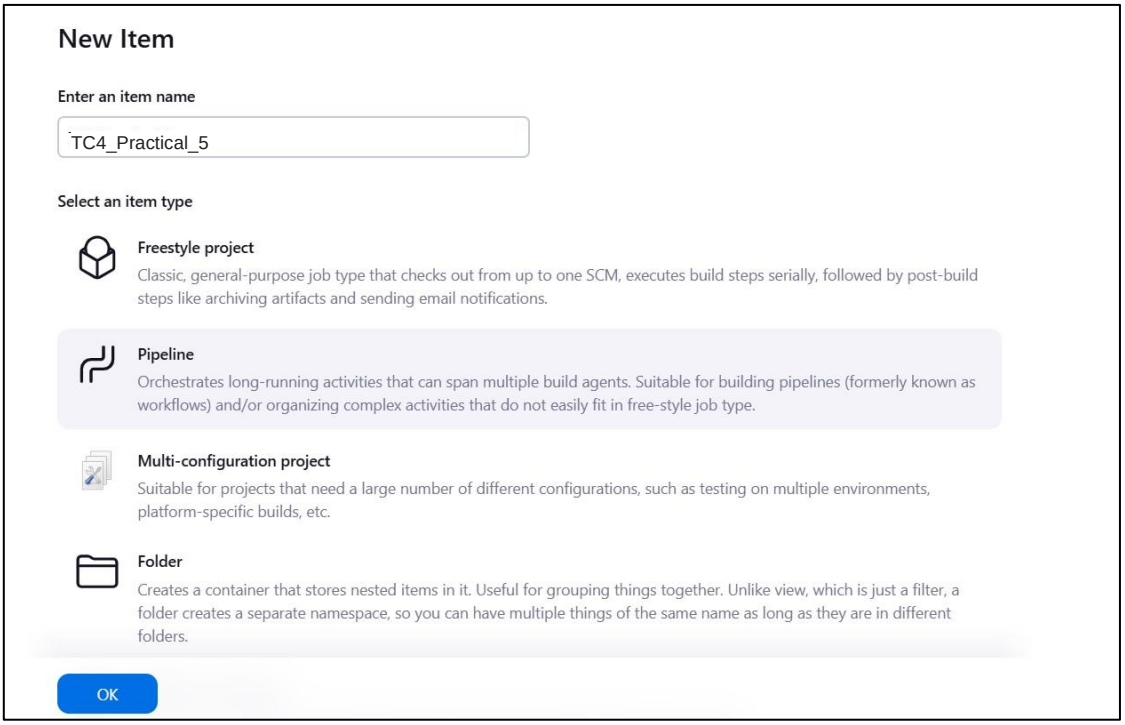
5. Dockerizing Jenkins Pipeline.

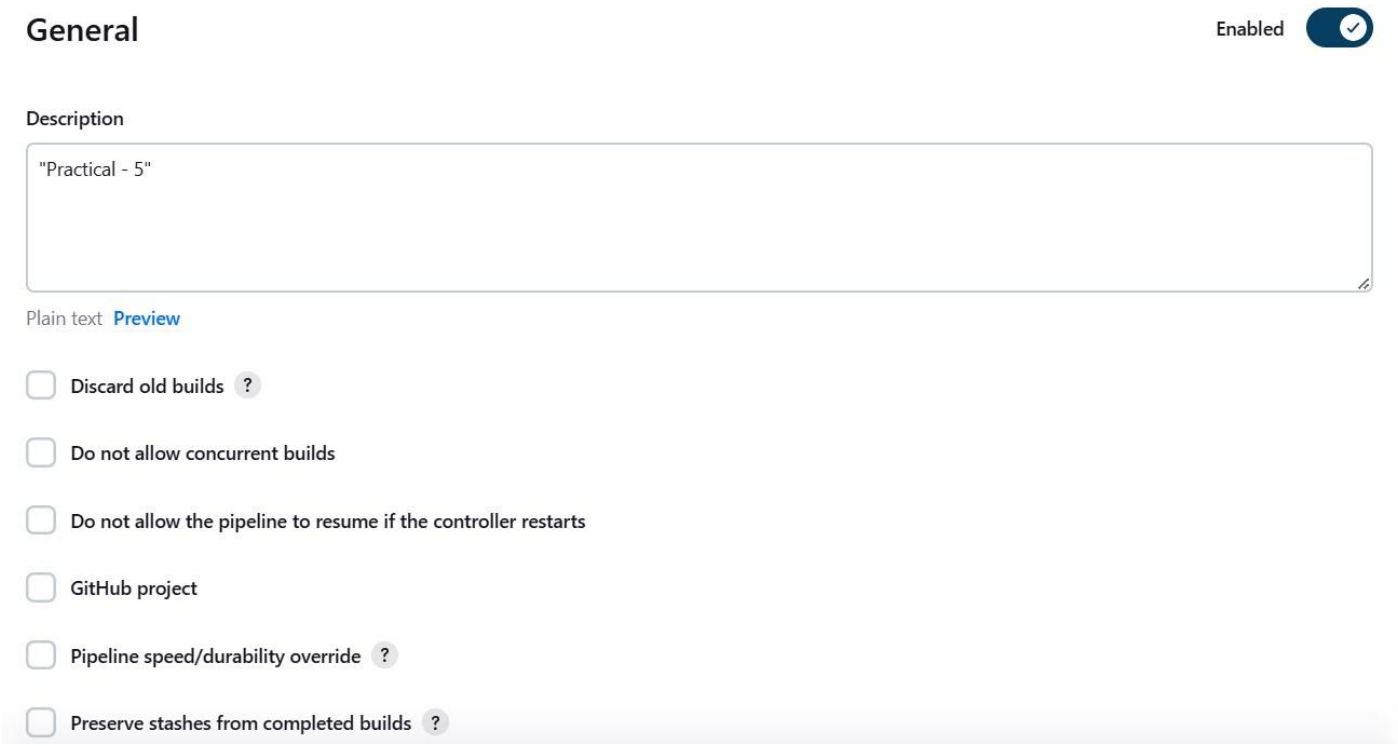
- **Pull an image from Registry**
  - Ensure that docker is installed in your pc
  - Pull the maven image (run following command)
  - $docker pull maven

```
C:\Users\Administrator>docker pull maven
Using default tag: latest
latest: Pulling from library/maven
32b824d45c61: Pull complete
fe18bb7e114f: Pull complete
581ebfe08d3f: Pull complete
7c7bdd063feb: Pull complete
28f1e2918031: Pull complete
5d747676dacd: Pull complete
5f80e8f4bfde: Pull complete
e626418b2bad: Pull complete
4f4fb700ef54: Pull complete
2a669a7f0633: Pull complete
Digest: sha256:9e63e6c1ab3535c4afe34fd86ec5716719b43c3ba5bdccb03b9afad579110bde
Status: Downloaded newer image for maven:latest
docker.io/library/maven:latest

What's next:
    View a summary of image vulnerabilities and recommendations → docker scout quickview maven

C:\Users\Administrator>
```

- Open Jenkins Dashboard
- Click on "**Dashboard**"
- Click on "**New Item**"
- Give Project Name i.e. "TC4_Practical_5"
- Select "**Pipeline**" job type
- Click on "**OK**"



- Give few words description "Practical - 5"

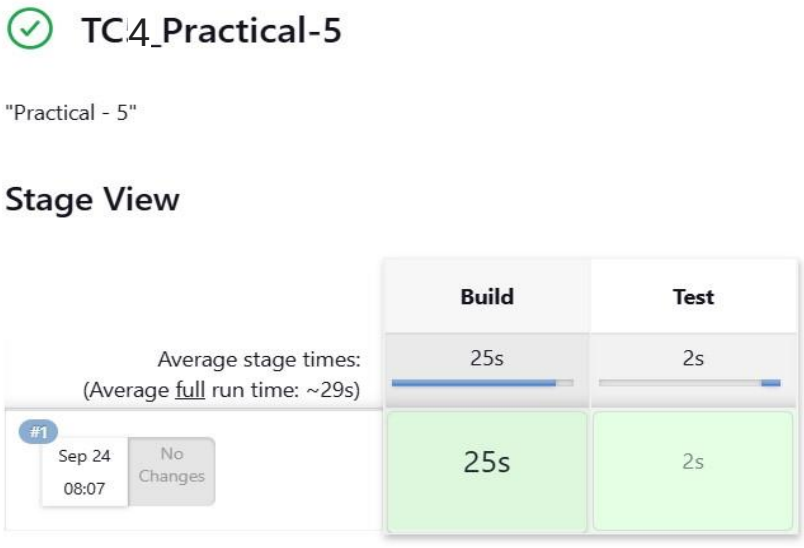


- Go to "Pipeline"
  - There are two option (i)Pipeline script (ii)Pipeline script from SCM
    - Select option one (i)Pipeline script
  - Write the following script:

```
pipeline { agent any
      stages {
      stage('Build') {
      steps {
                        bat 'docker run --rm --name my-maven-project -v
            "D:/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS (
            01CE0717)/LabPractical/Practicals/Prac_2/firstmavenapp:/usr/sr
            c/mymaven" -w /usr/src/mymaven maven mvn clean install'
                        }
            } stage('Test')
            { steps {
                        bat 'mvn -version'
                        }
                  }
            }
      }
```

  - Please change the path with your maven project folder.

- Click on "**Apply**" and then click on "**Save**"
- Click on "**Build Now**"



Console Output

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```
Started by user Jay dalsaniya
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\.jenkins\workspace\TC5_Practical-5
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] bat

C:\ProgramData\Jenkins\.jenkins\workspace\TC5_Practical-5>docker run --rm --name my-maven-project -v "D:/Marwadi University/SEMESTER - 7/DEVOPS
ESSENTIALS ( 01CE0717 )/Lab Practical/Practicals/Prac_2/firstmavenapp:/usr/src/mymaven" -w /usr/src/mymaven maven mvn clean install
[INFO] Scanning for projects...
[INFO]
[INFO] ----------------------< com.7TC5.app:firstmavenapp >----------------------
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO]   from pom.xml
[INFO] --------------------------------[ jar ]---------------------------------
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.1.0/maven-clean-plugin-3.1.0.pom
Progress (1): 1.4/5.2 kB
Progress (1): 2.8/5.2 kB
Progress (1): 4.1/5.2 kB
Progress (1): 5.2 kB

Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.1.0/maven-clean-plugin-3.1.0.pom (5.2 kB
```

```
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.15/plexus-utils-3.0.15.jar (239 kB at 327 kB/s)
[INFO] Installing /usr/src/mymaven/target/firstmavenapp-1.0-SNAPSHOT.jar to /root/.m2/repository/com/7TC5/app/firstmavenapp/1.0-
SNAPSHOT/firstmavenapp-1.0-SNAPSHOT.jar
[INFO] Installing /usr/src/mymaven/pom.xml to /root/.m2/repository/com/7TC5/app/firstmavenapp/1.0-SNAPSHOT/firstmavenapp-1.0-SNAPSHOT.pom
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  22.525 s
[INFO] Finished at: 2024-09-24T02:37:40Z
[INFO] ------------------------------------------------------------------------
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] bat

C:\ProgramData\Jenkins\.jenkins\workspace\TC5_Practical-5>mvn -version
Apache Maven 3.9.8 (36645f6c9b5079805ea5009217e36f2cffd34256)
Maven home: D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\apache-maven-3.9.8
Java version: 21.0.1, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk-21
Default locale: en_IN, platform encoding: UTF-8
OS name: "windows 11", version: "10.0", arch: "amd64", family: "windows"
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```