Step 1: Create a new repository in the github



Step 2: Move the frontend, backend, and k8s folders from the kubernetes directory to the Dev directory to organize project files.

```
ajay@Sparkajay:~/k8s-demo-ajay$ ls
Jenkinsfile README.md backend commands-to-execute commands-to-stop-instances frontend k8s pre-requisites-command
ajay@Sparkajay:~/k8s-demo-ajay$ |
```

Step 3: Initialized a Git repository in the Dev folder, added the frontend, backend, and k8s folders, committed the changes, and attempted to push to GitHub. Authentication failed due to password authentication being removed; using a personal access token (PAT) is required.

```
ajay@Sparkajay:~/k8s-demo-ajay$ nano Jenkinsfile
ajay@Sparkajay:~/k8s-demo-ajay$ git add .
ajay@Sparkajay:~/k8s-demo-ajay$ git commit -m "jenkinsfile"
[main 28ce081] jenkinsfile
1 file changed, 66 insertions(+)
create mode 100644 Jenkinsfile
ajay@Sparkajay:~/k8s-demo-ajay$ git push https://Ajay978680: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@github.com/Ajay978680/k8s-demo-ajay.git
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compression objects: 100% (3/3), done.
Writing objects: 100% (3/3), 962 bytes | 962.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Ajay978680/k8s-demo-ajay.git
dc6eb69..28ce081 main -> main
```

Step 4: Initialized a Git repository in the Dev folder, created a Jenkinsfile, added it to the repository, committed the changes, and successfully pushed the commit to the remote GitHub repository.

```
sowmiya@LAPTOP-E2BCEK44:~/Dev$ nano Jenkinsfile
sowmiya@LAPTOP-E2BCEK44:~/Dev$ git init
Reinitialized existing Git repository in /home/sowmiya/Dev/.git/
sowmiya@LAPTOP-E2BCEK44:~/Dev$ git add .
sowmiya@LAPTOP-E2BCEK44:~/Dev$ git add Jenkinsfile
sowmiya@LAPTOP-E2BCEK44:~/Dev$ git commit -m "initial commit"
[main 1028f89] initial commit
 1 file changed, 66 insertions(+)
 create mode 100644 Jenkinsfile
sowmiya@LAPTOP-E2BCEK44:~/Dev$ git push origin main
Username for 'https://github.com': Sowmiya-2024-git
Password for 'https://Sowmiya-2024-git@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 962 bytes | 962.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Sowmiya-2024-git/Dev.git
   3ebe6ab..1028f89 main -> main
```

Step 5: Create a new pipeline item in the jenkins



Step 6: The Jenkins dashboard displays the status of the "kubernetes" pipeline. The latest build (#5) was successful, while previous builds (#1 to #4) failed. The status section confirms that the last stable and successful build was #5, completed 3 hours and 37 minutes ago.

