what are different method to trigger pipeline in jenkins?

- Trigger builds remotely.
- Build after other projects are built.
- Build periodically.
- GitHub hook trigger for GITScm polling.
- Poll SCM.

what is the benefit of using master-slave architecture rather than building on master only?

- **Produce backups** Obviously, the major utility of master-slave database architecture is its ability to provide reliable backups through their chain of slave databases. The slave database can be turned off without affecting the master database's activities. This is because live data snapshots will be replicated to the slave database, and data resources will remain intact even if the master database fails.
- Scale out the application When your number of users increases and your app's usage skyrockets, it's critical to scale out your app so that your audience has a consistent experience. By splitting your data load across numerous databases, the master-slave database architecture can help you scale out your application.
- **Split your work without causing a mess** You can use your slave nodes to collect the necessary data and generate a complete report, while the master node pushes new updates and features to your application server.
- **Top-notch performance** It is extremely fast and fetches data without any issues, imposing no restrictions regarding performance and time to load the data.

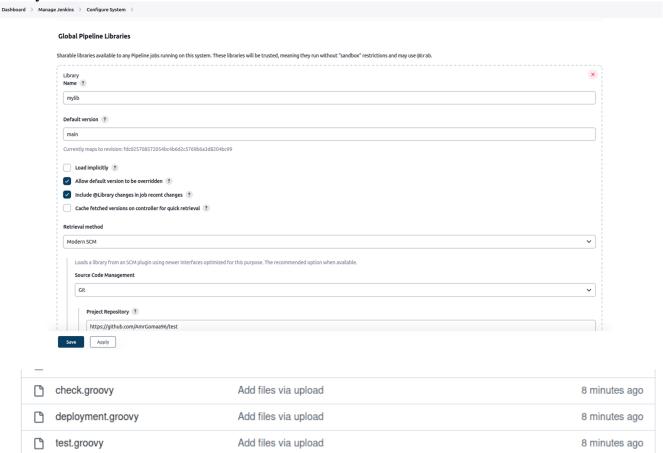
what is different between authorization and authentication?

- Authentication verifies the identity of a user or service
- authorization determines their access rights.

what is the benefit of making organization job in jenkins?

Organization Folders enable Jenkins to monitor an entire GitHub Organization, Bitbucket Team/Project, GitLab organization, or Gitea organization and automatically create new Multibranch Pipelines for repositories which contain branches and pull requests containing a Jenkinsfile

make jenkins-shared-library and make your jenkinsfile which you used in lab2 to point to this library



```
Dashboard > test > #1
                                                                                                                                                     [Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/jenkins_home/workspace/test
             View as plain text

☑ Edit Build Information

      Delete build '#1'
      ♦ Git Build Data
                                                                                                                                                      [PipeLine] git
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
using credential github-token
     using credential github-token

Cloning the remote 6it repository

Cloning repository https://github.com/AmrGomaa96/test

> git init /war/jenkins, home/workspace/test # timeout=10

Fetching upstream changes from https://github.com/AmrGomaa96/test

> git --version # timeout=10

> git --version # git version 2.30.2'

using GIT_ASCASS to set credentials

> git fetch --tags --force --progress -- https://github.com/AmrGomaa96/test +refs/heads/*:refs/remotes/origin/* # timeout=10

> git config remote.origin.url https://github.com/AmrGomaa96/test # timeout=10

> git config --add remote.origin.fetch -refs/heads/*:refs/remotes/origin/* # timeout=10

Avoid second fetch

> git respace refs/remotes/origin/main^*(commit) # timeout=10
    Pipeline Steps
    Workspaces
                                                                                                                                                  Avoid second fetch
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision fdc025708572054bc4b6d2c5769b6a3d8204bc99 (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f fdc025708572054bc4b6d2c5769b6a3d8204bc99 # timeout=10
> git checkout -o-abbrev # timeout=10
> git checkout -b main fdc025708572054bc4b6d2c5769b6a3d8204bc99 # timeout=10
Commit message: "Update Jenkinsfile"
First time build. Skipping changelog.
[Pipeline] sh
+ ls
Dockerfile
                                                                                                                                                     + is
Dockerfile
                                                                                                                                                     Jenkinsfile
README.md
                                                                                                                                                     check.groovy
deployment.groovy
test.groovy
testfile
                                                                                                                                                     [Pipeline] }
[Pipeline] // stage
```

Give feedback

bonus >>>> try to make new slave as container and configure master to use it

