what are different method to trigger pipeline in jenkins?

- Manually
- option in pipeline configuration called "build periodically"
- webhook
- organization folder job

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

- => sometimes each part of code needs a specific os to run on
- => part of code needs a specific version of java and other part needs another one
- => to run multiple pipelines at the same time

what is different between authorization and authentication ?

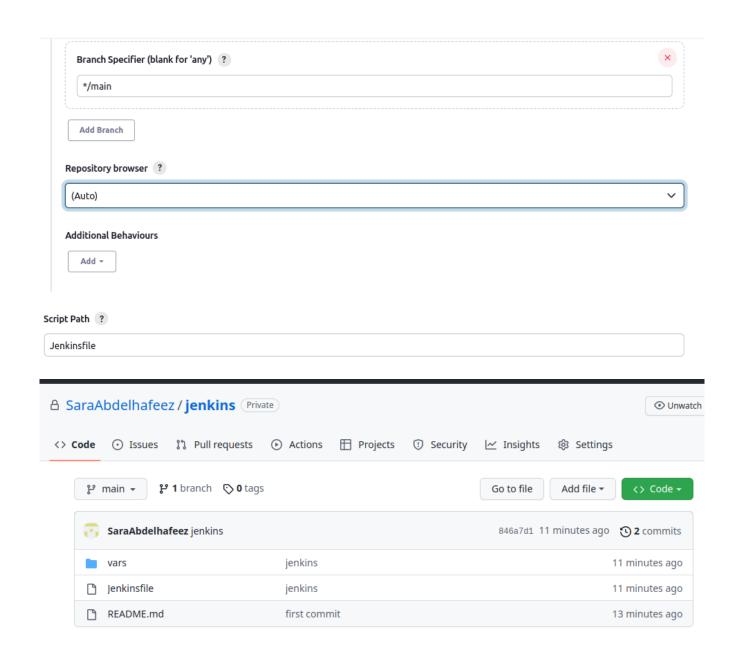
Authentication verifies the identity of a user or service authorization determines their access rights

what is the benefit of making organization job in jenkins?

Organization Folders enable Jenkins to monitor an entire GitHub Organization

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





```
Started by user Sara Abdelhafeez
Obtained Jenkinsfile from git https://github.com/SaraAbdelhafeez/jenkins
Loading library jenkins@main
Examining SaraAbdelhafeez/jenkins
Attempting to resolve main as a branch
Resolved main as branch main at revision 3e2b497e09a3400eb815ed6121e8a95f9aa199e3
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
using credential git-token
 > git rev-parse --resolve-git-dir /var/jenkins_home/workspace/task3-
pipeline@libs/851b4766a7a657ac98e09078f17b78ef0e13bd56f45ac3c7988657ee563b8924/.qit # timeout=10
Fetching changes from the remote Git repository
 > qit confiq remote.oriqin.url https://qithub.com/SaraAbdelhafeez/jenkins.qit # timeout=10
Fetching without tags
Fetching upstream changes from https://github.com/SaraAbdelhafeez/jenkins.git
 > git --version # timeout=10
 > git --version # 'git version 2.30.2'
using GIT_ASKPASS to set credentials
 > git fetch --no-tags --force --progress -- https://github.com/SaraAbdelhafeez/jenkins.git +refs/h
timeout=10
Checking out Revision 3e2b497e09a3400eb815ed6121e8a95f9aa199e3 (main)
 > git config core.sparsecheckout # timeout=10
 > git checkout -f 3e2b497e09a3400eb815ed6121e8a95f9aa199e3 # timeout=10
Commit message: "Update Jenkinsfile"
 > qit rev-list --no-walk 3e2b497e09a3400eb815ed6121e8a95f9aa199e3 # timeout=10
[Pipeline] Start of Pipeline
> git rev-list --no-walk 3e2b497e09a3400eb815ed6121e8a95f9aa199e3 # timeout=10
[Pipeline] Start of Pipeline
[Pipeline] node
Running on jenkins-slave in /home/ubuntu/jenkins home/workspace/task3-pipeline
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
using credential git-token
Fetching changes from the remote Git repository
> git rev-parse --resolve-git-dir /home/ubuntu/jenkins home/workspace/task3-pipeline/.git # timeout
> git config remote.origin.url https://github.com/SaraAbdelhafeez/jenkins # timeout=10
Fetching upstream changes from https://github.com/SaraAbdelhafeez/jenkins
> git --version # timeout=10
> git --version # 'git version 2.34.1'
using GIT ASKPASS to set credentials
> git fetch --tags --force --progress -- https://github.com/SaraAbdelhafeez/jenkins +refs/heads/*:r
Checking out Revision 3e2b497e09a3400eb815ed612le8a95f9aa199e3 (refs/remotes/origin/main)
Commit message: "Update Jenkinsfile"
[Pipeline] }
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
> git config core.sparsecheckout # timeout=10
> git checkout -f 3e2b497e09a3400eb815ed6121e8a95f9aa199e3 # timeout=10
[Pipeline] // stage
```

[Pipeline] withEnv

> git checkout -f 3e2b497e09a3
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (check)
[Pipeline] echo
checking your code
[Pipeline] echo
dev
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (test)
[Pipeline] echo
testing your app
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (deployment)
[Pipeline] echo
your code is deployed right now
[Pipeline] echo
this build number 8
[Pipeline] }
[Pipeline] // stage
[Dinolino] l

```
[Pipeline] // stage
 [Pipeline] stage
 [Pipeline] { (test)
 [Pipeline] echo
 testing your app
 [Pipeline] }
 [Pipeline] // stage
 [Pipeline] stage
 [Pipeline] { (deployment)
 [Pipeline] echo
 your code is deployed right now
 [Pipeline] echo
 this build number 8
 [Pipeline] }
 [Pipeline] // stage
 [Pipeline] }
 [Pipeline] // withEnv
 [Pipeline] }
 [Pipeline] // node
 [Pipeline] End of Pipeline
 Finished: SUCCESS
```