Java Full Stack Training

14-02-2022

Day 1

**Introduction**

15-02-2022

Day 2

Ip address : the default localhost or nodename or machinename or 127.0.0.1

ipconfig 168.10.132.56

ipAddress : 0 to 255

0.0.0.0

256 pow 4 number of ip address we can create under one network environment.

Day 3

16-02-2022

Version control tool : These tool help to keep the track or record every changes done in files or folders or application or software etc.

There are different types of version control tools are available in market.

1. Local version control : RCS : Revision control system: in work only one machine.
2. Centralized version control : SVN : We can connection local machine to server machine. After finish our task we will push this code to central machine other people pull that code and push it back to central after done the changes.
3. Distributed version control : in distributed version control they provide as local as well as remote repository. Git is a type of Distributed version control.

Git is a distributed sub version control tool use to manage the source code or application.

Distributed version control system keeps track of software or application revision and allow many developer or programmer or user to work on given project within a maintaining connection to common network.

Git is a open source distributed version control system.

Git provided lot of command those command based upon the Unix.

Create the folder in desktop or any drive

Test Repository

First create any type of files ie test files file or folder can be any type.

These files or folder maintain by files system based upon the OS.

Inside that folder you have to open terminal or git bash

To make this folder as a local repository we have to use the command as

git init (.git folder will create after executed this command). First time only once

.git folder hidden folder consider in Unix or Mac.

ls –a (this command we can execute only in unix or git bash)

git status : This command is use to provide the current status of our repository.

Repository : it is just be like a folder or directory maintain by git.

We have add those files from file system to staging area.

git add filename : it is use to add only one file

Or

git add . : all files or folder present in current directory

git status

we want to push this file from staging area to local repository

git commit –m “1st task done”

first time we will get the error.

If you get the error you have to add your name and email id (only one time).

git config --global user.name “Raj”

git config --global user.email “[raj@gmail.com](mailto:raj@gmail.com)”

git commit –m “1st task done”

git status

do the changes ie create new file or folder or do some changes in existing file

git status

git add .

git status

git commit –m “commit msg”

staging area : this area provided by git where the files or folder hold before commit.

remote repository : remote repository is just like a network folder which help to share the data between two teams.

github, gitlabs, aws(code commit) or azure etc.

github remote repository

to connect local repository to remote repository we have to run the command as

git remote add origin URL

git remote add origin https://github.com/Kaleakash/test\_app.git

you have to execute this command only once

git push -u origin main

git push -u origin master

to generate the token

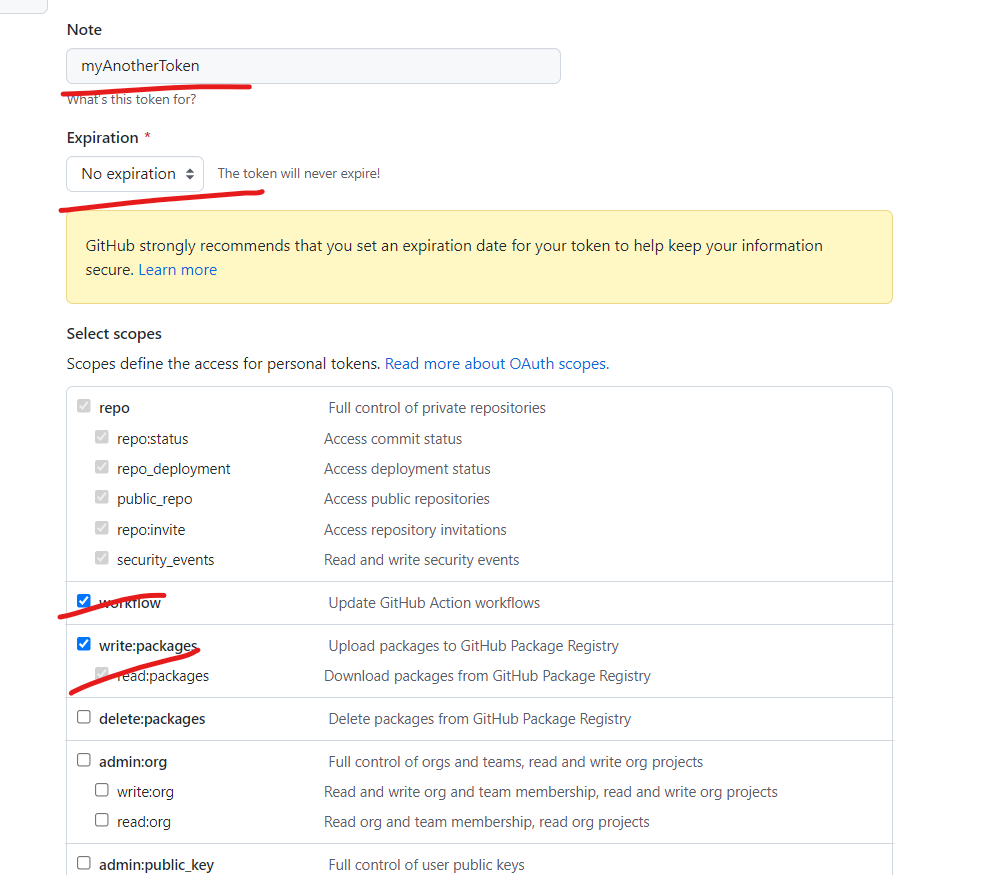
In Github account

Right click in setting option in Remote repository (right side on top of web page +)

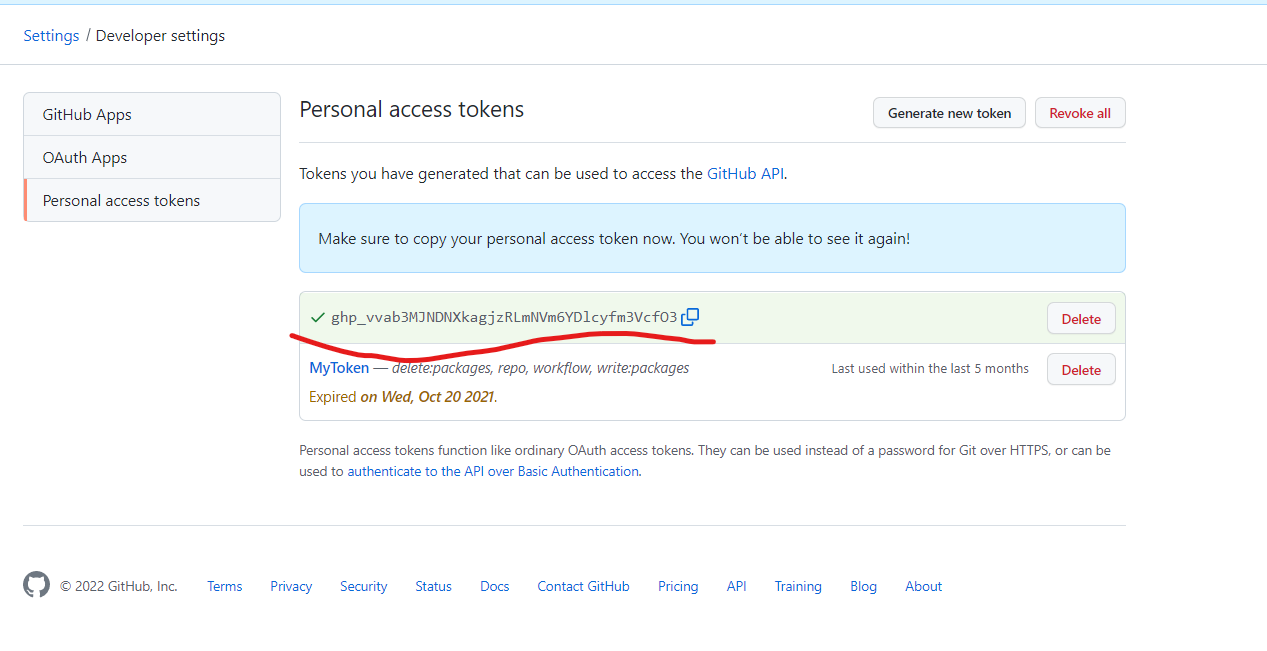
search developer setting option

Click on personal access token option

Generate new token



Then copy the token



Got check local machine connect to which remote repository

git remote show origin

To remove remote origin from local repository run the command as

git remote remove origin

git remote add origin https://github.com/Kaleakash/test\_app.git

git remote add origin <https://token@github.com/Kaleakash/test_app.git>

ghp\_XfNggV9m2yhlbUqDRqpFhjhJq9nuIj211UZM

git remote add origin <https://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@github.com/Kaleakash/test_app.git>

git remote add origin [https:// ghp\_vvab3MJNDNXkagjzRLmNVm6YDlcyfm3VcfO3@github.com/Kaleakash/test\_app.git](https://%20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@github.com/Kaleakash/test_app.git)

git push –u origin main

or ­

git push –u origin master

Day 4

17-02-2022

git branch : git branch is like a pointer which hold more than one commit details.

By default one branch created ie master or main.

To check branch we have to use the command as

git branch

command to create the branch

git branch branchName

to switch from one branch to another branch

git checkout branchName

git checkout –b branchName (it will create the branch and switch to created branch)

if we are planning to do any task don’t d do in main or master (default branch).

If we want to do any task we have create the branch and do that task inside that branch.

Merge the branch

git merge branchName

git branch –D branchName

First check the default branch it may be main or master

git status (status must be clean)

create the branch

you are main or master.

git checkout –b A

do some task like created file, modify file or delete file etc

git add .

git commit –m “msg”

please switch to main or master branch.

Git checkout master or main

git checkout –b B

do some task like created file, modify file or delete file etc

git add .

git commit –m

git checkout master or main

if you want to add the branch A or B or etc code

in main branch or master branch run the command as

git merge branchName

after that you can delete user defined branch

git branch –D branchName

git clone URL : using this command we can download the all git repository in local machine.

This command is use to download existing repository to local repository (first time).

Next time if you want new updated which present in remote repository we have to open the git bash terminal insider a repository folder(.git folder must be present) run the command as or inside a clone folder.

git pull : this command is use to get new updated present in existing repository.

10 min time to push , clone and pull with our own repository

git rebase command

Java :

Java is programming language

Java is object oriented programming language.

Java is platform independent and pure object oriented programming language.

Difference procedure language and Object oriented language.

C

C++

OOPs

Object : any real world entity.

State or properties 🡪 have 🡪 attribute, variable, fields etc

Person

Behaviour 🡪 do/does -🡪 functions / methods

Place

Bank

Animal

Car

Etc

Object is concept.

Class : blue print of object or template of object or user-defined data types which help to create the object or memory.

Syntax of class

class className {

fields;

methods;

}

ClassName referenceName = new ClassName();

Syntax class

class ClassName {

pre-defined main method.

}

class Test {

public static void main(String args[]) {

System.out.println(“Welcome to Java…”);

}

}

Class name must be follow Pascal naming rules.

1. If class contains one word first letter must be upper case.
2. If class contains more than one word. Each word first letter upper case.
3. No space between two word.

Install the java it may be 8, 11, 15 m 16 or 17

Then check in folder

C:\Program Files\Java

C:\Program Files\Java\jdk-11.0.12\bin

Java provide jdk (java development kit) which help to compile and run the program.

javac (Java compiler ) : it is use to compile program

java (java interpreter ) : it is use to run the program

if

java --version

javac

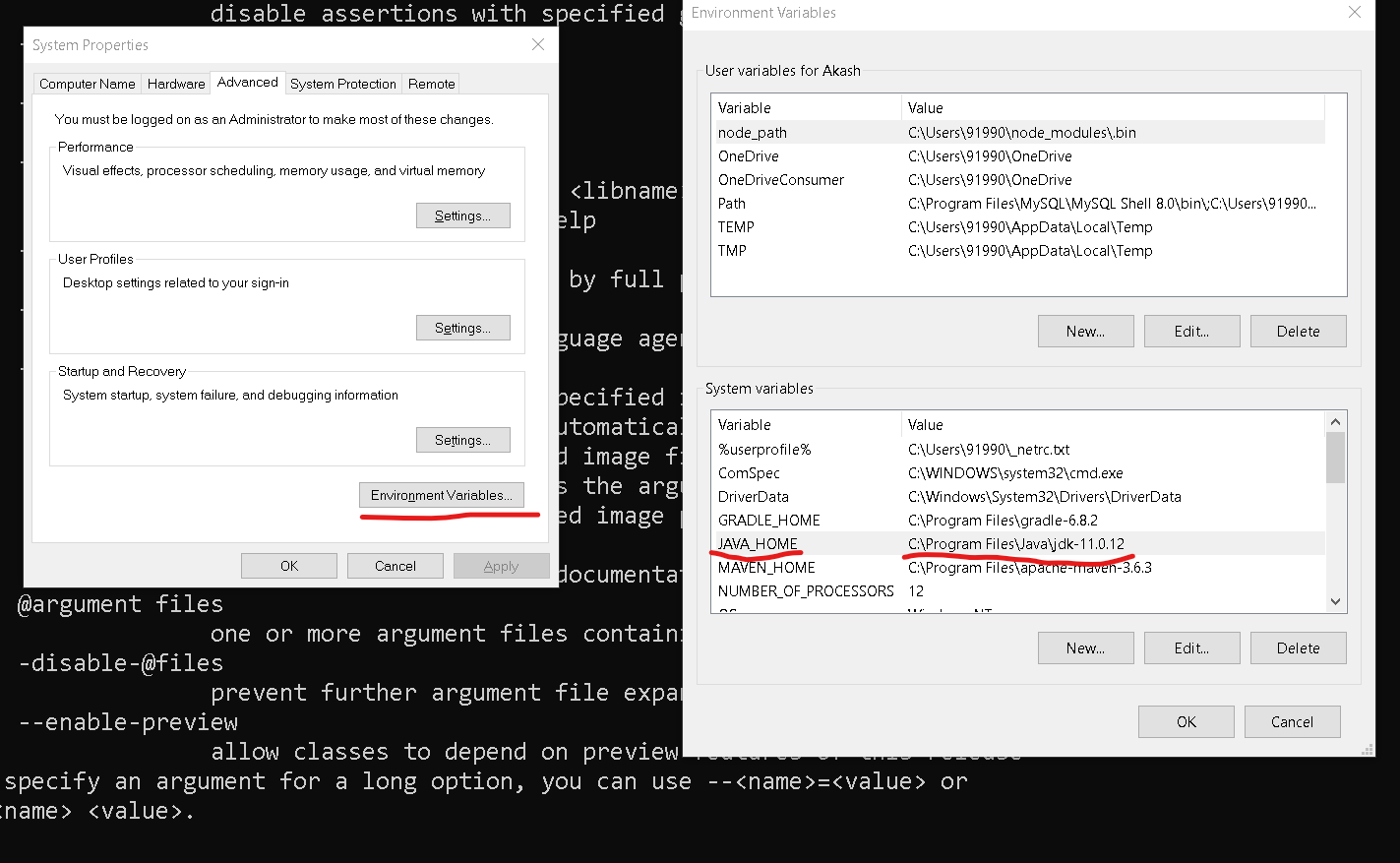
java

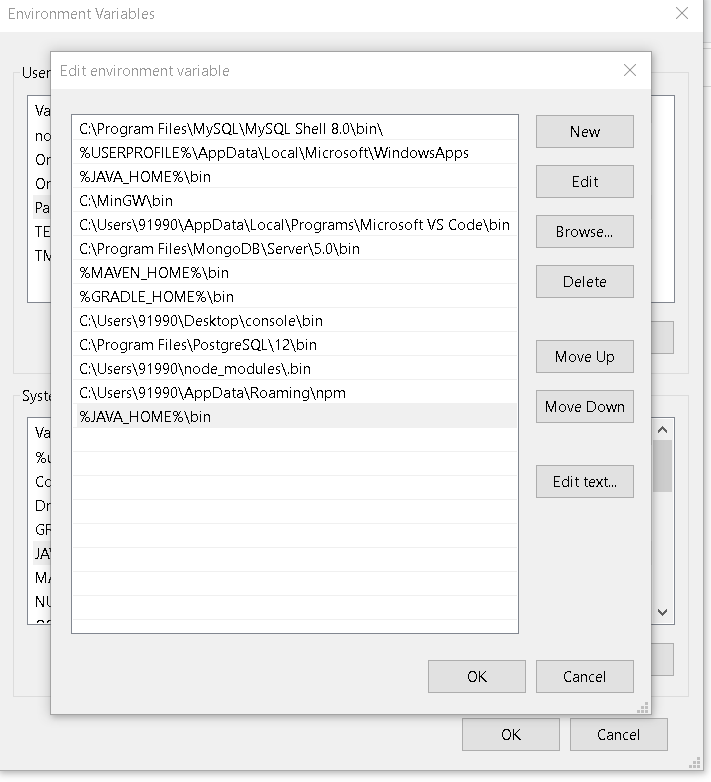
command not found

Then copy path till bin folder with respective version

C:\Program Files\Java\jdk-11.0.12

Right click on my computer icon and properties and search environment variable.





Then open new command prompt

Then check

java --version

javac

java

open any editor

class Test {

public static void main(String args[]) {

System.out.println("Welcome to Java...");

}

}

Save the program with name Test.java (please save the program with className).

Open the command prompt or terminal

To compile the program

javac Test.java

To run the program

java Test