

What is Git and its functionalities?

Git is a version control system used for tracking changes in computer files.

It is generally used for source code management in software development.

Git is used tracking changes in the source code.

The distributed version control tool is used for code management.

It allows multiple developer to work together.

It supports non linear development through its thousand of parallel branches.

Features of Git

→ tracks history

→ It's free and open source.

→ It supports non linear development

→ Branching is easy

It supports collaboration.

Now How we can install git in with the Ubuntu Default package manager

First we use the apt package management tools to update our local package index

\$ sudo apt get update

After completing update we can install git

\$ sudo apt get install git

We can confirm that we have installed git correctly by running the following command and checking that we receive relevant output

\$ git version
git version 2.25.1

→ We have to Create repo in git hub profile

For generating ssh key in Ubuntu OS Command:

\$ ssh -t ed25519 -C "p@shash0808"

- Here after creating public & private key we have to search .Pub file in particular directory where we have executed the above commands.



Then we have to open Key.Pub file & copy the GitHub keys.

After that we have to click into New SSH key (on right side). If copied key we have to paste other key description along with title & then new SSH key will be associated with newest account.

→ Now to Clone a repository in Terminal

a) Open the terminal.

b) Change the Current Working directory to the location where we want to clone directory

c) Type git clone , and then paste the URL as we copied earlier ~~and then paste the URL as we copied~~ from the particular repo

```
$ git clone https://github.com/Picedes1/  
/LSS-remedial-class-notes
```

→ Now we have to pass the command :

git init

→ # Then for login use command

```
$ git remote add origin "http://git hub.com/Picedes1/  
/LSS-remedial-class-notes.git"
```

- \$ git remote -v (# for checking what are the operations allowed)

<https://github.com/piccoders/Les-Semidiscusses-notes>

→ No 0 for pushing into github repository
necessary steps.

\$ git add emp.sh

Now for committing into that file

\$ git commit (I'm "my 1st Commit".)

Here in 3rd step we have to create token in github accounts. for that

Go to q Setting → Developers Setting → personal account token & Generate new token by selecting repo & token number will be generated

Go to terminal.

\$ git push -u origin master.

Eg: username for : https://github.com/piccoders

password for : https://piccoders1@github.com

enumerating objects : 3, done!

Functions In Detail?

10 marks.

Function is a command in Linux which is used to create function or method.

a) using function keyword -

A function in Linux can be declared by using keyword function before the name of the function.

Different statement can be separated by a semicolon or a new line.

function name { commands; }

ex.

function hello
 {

Echo Hello, welcome to Ruct world.

}

\$ & hello

Hello, welcome to Ruct world.

using Parenthesis:-

A function can also be declared using parenthesis after the name of the function.

Different statement can be separated by a semicolon or new line.

Syntax

```
name () { Commands ; }
```

Ex

```
hello()
```

```
{
```

```
Echo Hello, welcome to RVC World.
```

```
}
```

```
$ hello
```

```
o/p Hello, welcome to RVC World.
```

3) Parameterized function:-

We can define a function that will accept parameter while calling a function.

These parameters would be represented by \$1, \$2 and \$3 and so on.

```
$ cat RVC
```

```
$ cat Banglore
```

```
HELLO()
```

```
{
```

```
Echo "Hello World $1 $2"
```

```
}
```

D/p -> Hello world RVCE Bangalore.

Returing Value from function:-

If you execute an exit command inside a function.

its effect is not only to terminate execution of the function but also of the shell program that called the function.

Syntax

return [N]

ex

```
function add()
{
    add = $(( ${1} + ${2} ))
    return $add
}
```

\$ add 16

\$ echo \$? .

7

Echo \$? is used to display last return value

Nested function

A function inside Another function is called nested function

Ex

number one()

{

echo "this is the 1st function"
number two()

}

number()

{

echo "this is the 2nd fun"

}

number one()

O/p → This is <the ^{1st} function speaking
This is the 2nd function.