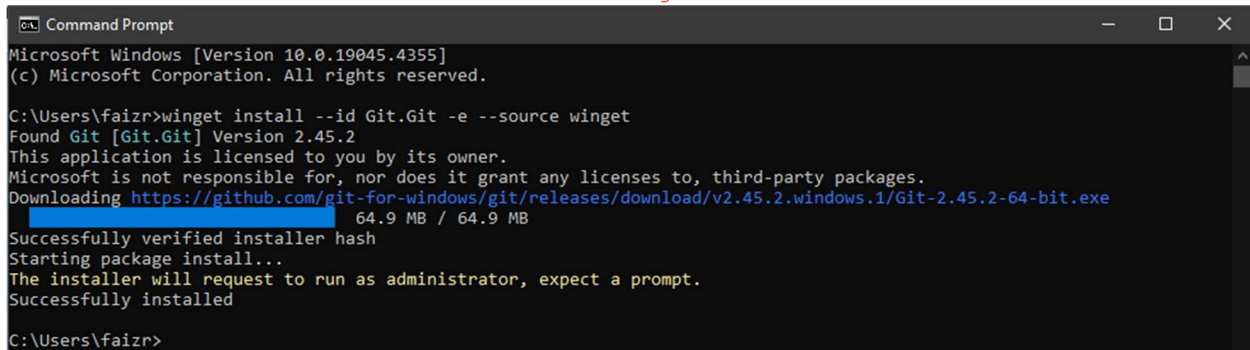


Installing Git

Type the below command in cmd, the installation is start automatically.

```
winget install --id Git.Git -e --source winget
```



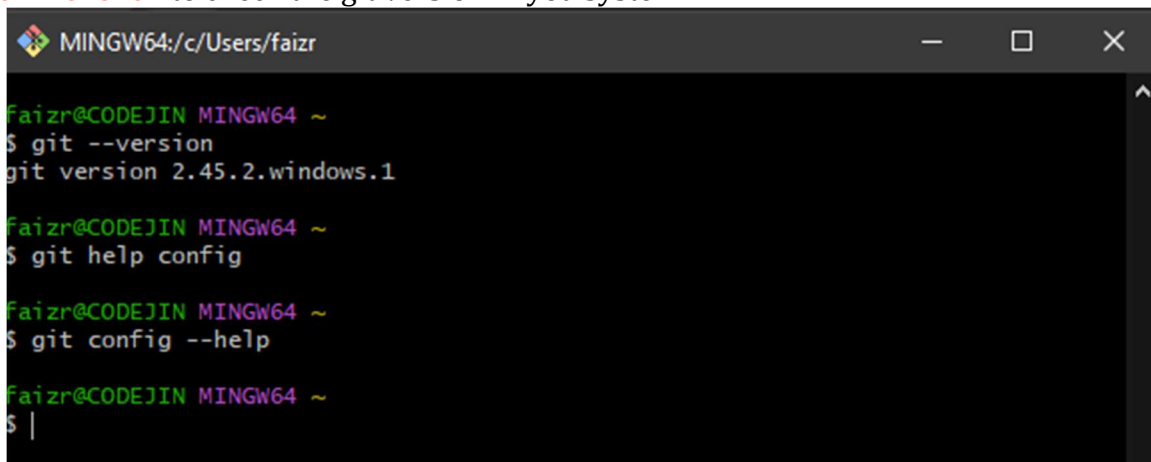
```
Command Prompt
Microsoft Windows [Version 10.0.19045.4355]
(c) Microsoft Corporation. All rights reserved.

C:\Users\faizr>winget install --id Git.Git -e --source winget
Found Git [Git.Git] Version 2.45.2
This application is licensed to you by its owner.
Microsoft is not responsible for, nor does it grant any licenses to, third-party packages.
Downloading https://github.com/git-for-windows/git/releases/download/v2.45.2.windows.1/Git-2.45.2-64-bit.exe
64.9 MB / 64.9 MB
Successfully verified installer hash
Starting package install...
The installer will request to run as administrator, expect a prompt.
Successfully installed

C:\Users\faizr>
```

Check Git Version

Type `git --version` to check the git version in you system



```
MINGW64:/c/Users/faizr

faizr@CODEJIN MINGW64 ~
$ git --version
git version 2.45.2.windows.1

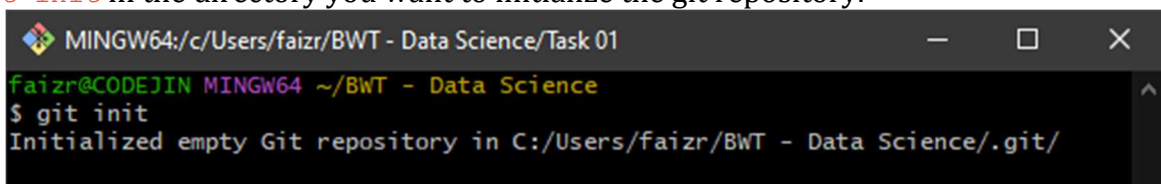
faizr@CODEJIN MINGW64 ~
$ git help config

faizr@CODEJIN MINGW64 ~
$ git config --help

faizr@CODEJIN MINGW64 ~
$ |
```

Initiate Git repository

Type `git init` in the directory you want to initialize the git repository.

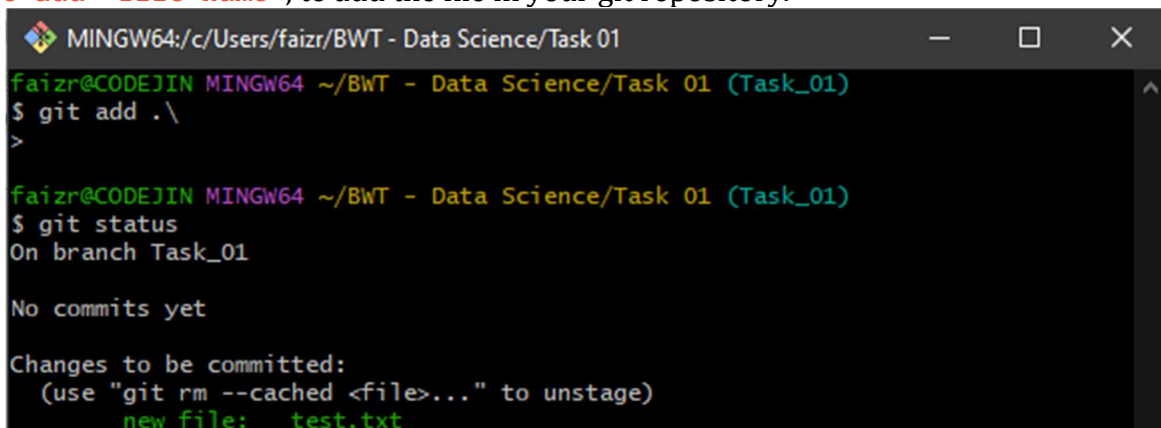


```
MINGW64:/c/Users/faizr/BWT - Data Science/Task 01

faizr@CODEJIN MINGW64 ~/BWT - Data Science
$ git init
Initialized empty Git repository in C:/Users/faizr/BWT - Data Science/.git/
```

Add Files

Type `git add "file name"`, to add the file in your git repository.



```
MINGW64:/c/Users/faizr/BWT - Data Science/Task 01

faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ git add .\
>

faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ git status
On branch Task_01

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   test.txt
```

Commit

Type `git commit -m "your message"`, to add the commit in your repository.

```

MINGW64:/c/Users/faizr/BWT - Data Science/Task 01
faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ git commit -m "This is the first task"
[Task_01 (root-commit) a9470df] This is the first task
1 file changed, 1 insertion(+)
create mode 100644 Task 01/test.txt

```

Extra Mile

Git is the version control, it helps to tract the version, track the changing made, track the changing made by who, helps to collaborate in coding work space.

Help

Type `git config -help`, it'll show you how the current code work, how you can use.

git-config(1) Manual Page

NAME

git-config - Get and set repository or global options

SYNOPSIS

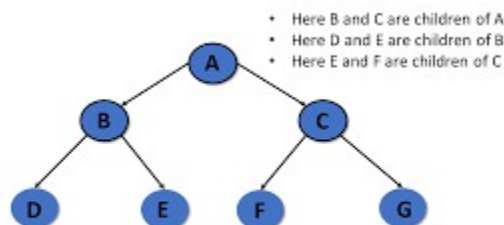
```

git config [<file-option>] [--type=<type>] [--comment=<message>] [--fixed-value] [--show-origins] [--show-scope] [-z | --null] <name> [<value> [<value-pattern>]]
git config [<file-option>] [--type=<type>] [--comment=<message>] --add <name> <value>
git config [<file-option>] [--type=<type>] [--comment=<message>] [--fixed-value] --replace-all <name> <value> [<value-pattern>]
git config [<file-option>] [--type=<type>] [--show-origins] [--show-scope] [-z | --null] [--fixed-value] --get <name> [<value-pattern>]
git config [<file-option>] [--type=<type>] [--show-origins] [--show-scope] [-z | --null] [--fixed-value] --get-all <name>

```

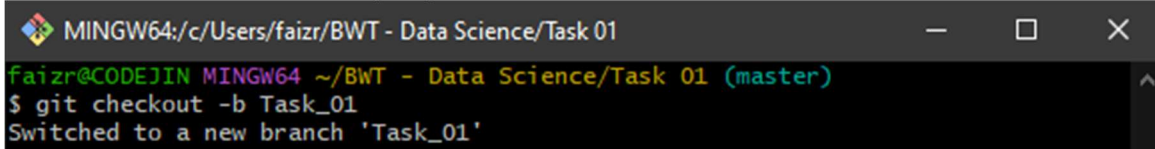
Branches

When we initiate the git repository, it by default creates a master branch. But suppose you have to create such a workflow, that you can't rely on just the master branch, you need more child branches, as shown in the figure.



To create a child branch inside the master branch, you need to have subdirectory and then we can create a child branch.

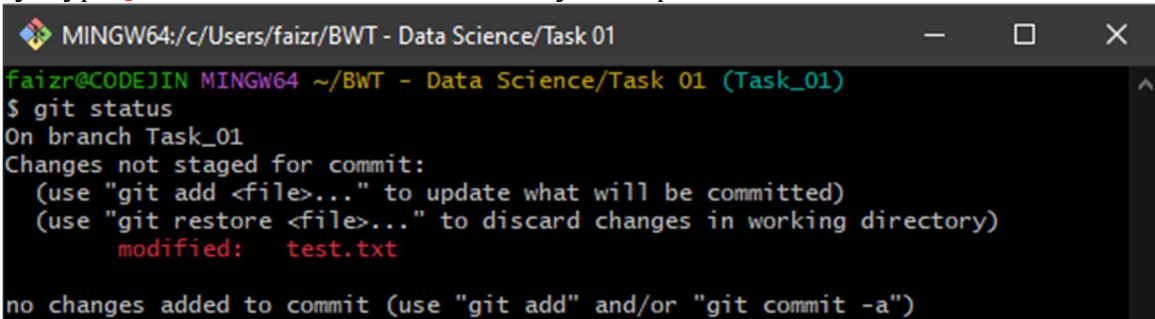
Type `git checkout -b "branch name"`, to create the child branch. Branches helps us to create a hierarchy of our architecture of the program.



```
MINGW64:/c/Users/faizr/BWT - Data Science/Task 01
faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (master)
$ git checkout -b Task_01
Switched to a new branch 'Task_01'
```

Git Status

Git status shows us after initiating the repo, what new files, changes made in the repository, it shows with red text, that things are changed and green shows that the changes have been added to the repository. Type `git status` to see the status of your repo.

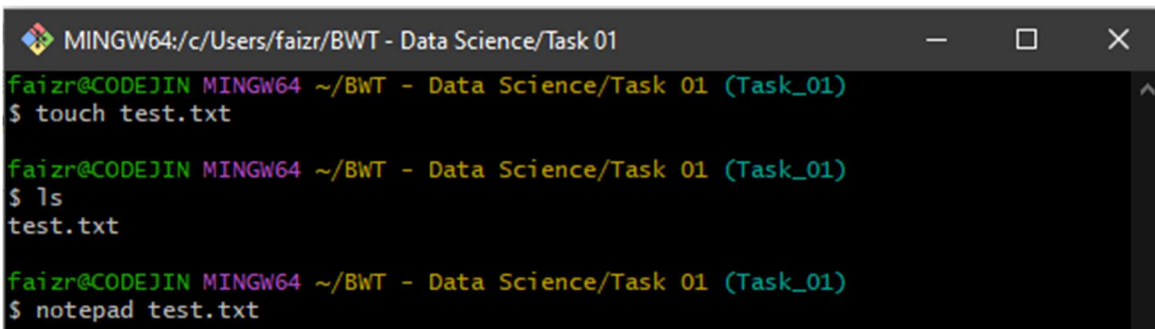


```
MINGW64:/c/Users/faizr/BWT - Data Science/Task 01
faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ git status
On branch Task_01
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   test.txt

no changes added to commit (use "git add" and/or "git commit -a")
```

Creating/Opening File

Type `touch "filename.extention"`, to create a file/notepad. To open the file type `notepad "filename.extention"`.



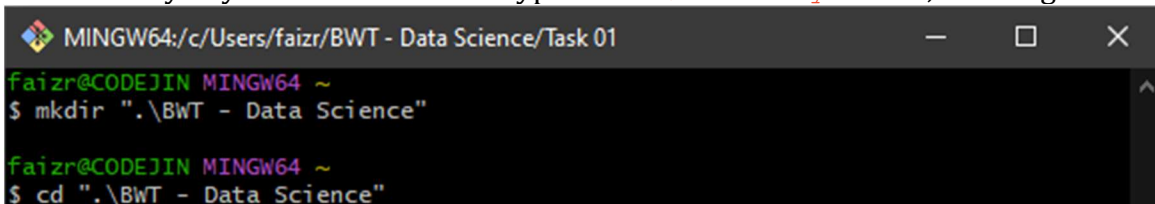
```
MINGW64:/c/Users/faizr/BWT - Data Science/Task 01
faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ touch test.txt

faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ ls
test.txt

faizr@CODEJIN MINGW64 ~/BWT - Data Science/Task 01 (Task_01)
$ notepad test.txt
```

Basic Commands

Type `dir` or `ls` to see the list of directory in your current folder. Type `mkdir "directory name"`, to create a new directory in your current folder. Type `cd ".\directory name"`, to change the directory.



```
MINGW64:/c/Users/faizr/BWT - Data Science/Task 01
faizr@CODEJIN MINGW64 ~
$ mkdir ".\BWT - Data Science"

faizr@CODEJIN MINGW64 ~
$ cd ".\BWT - Data Science"
```