

SEPM Experiment 3

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T13-58

AIM:-

To perform various GIT operations on local and remote repositories using GIT cheat-sheet

Theory:-

Git add

Moves changes from the working directory to the staging area. This gives you the opportunity to prepare a snapshot before committing it to the official history.

Git branch

This command is your general-purpose branch administration tool. It lets you create isolated development environments within a single repository.

Git clone

Creates a copy of an existing Git repository. Cloning is the most common way for developers to obtain a working copy of a central repository.

Git commit

Takes the staged snapshot and commits it to the project history. Combined with git add, this defines the basic workflow for all Git users.

git config

A convenient way to set configuration options for your Git installation. You'll typically only need to use this immediately after installing Git on a new development machine.

git init

Initializes a new Git repository. If you want to place a project under revision control, this is the first command you need to learn.

git pull

Pulling is the automated version of git fetch. It downloads a branch from a remote repository, then immediately merges it into the current branch. This is the Git equivalent of svn update.

```
15L@203-10 MINGW64 ~ (master)
$ cd desktop

15L@203-10 MINGW64 ~/desktop (main)
$ git config --global user.name "RahulKSEPM"

15L@203-10 MINGW64 ~/desktop (main)
$ git config --global user.email "rahulkumhar2604@gmail.com"

15L@203-10 MINGW64 ~/desktop (main)
$ git config --global color.ui true

15L@203-10 MINGW64 ~/desktop (main)
$ git config --global --list
user.email=rahulkumhar2604@gmail.com
user.name=RahulKSEPM
color.ui=true

15L@203-10 MINGW64 ~/desktop (main)
$ mkdir git-RK

15L@203-10 MINGW64 ~/desktop (main)
$ cd git-RK
```

```

15L@203-10 MINGW64 ~/desktop (main)
$ git config --global --list
user.email=rahulkumhar2604@gmail.com
user.name=RahulKSEPM
color.ui=true

15L@203-10 MINGW64 ~/desktop (main)
$ mkdir git-RK

15L@203-10 MINGW64 ~/desktop (main)
$ cd git-RK

15L@203-10 MINGW64 ~/desktop/git-RK (main)
$ git config --global --list
user.email=rahulkumhar2604@gmail.com
user.name=RahulKSEPM
color.ui=true

15L@203-10 MINGW64 ~/desktop/git-RK (main)
$ cat ~/.gitconfig
[user]
    email = rahulkumhar2604@gmail.com
    name = RahulKSEPM
[color]
    ui = true

15L@203-10 MINGW64 ~/desktop/git-RK (main)
$ mkdir git-lab

15L@203-10 MINGW64 ~/desktop/git-RK (main)
$ cd git-lab

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (main)
$ git init
Initialized empty Git repository in C:/Users/15L/Desktop/git-RK/git-lab/.git/

```

```

$ cd git-lab

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (main)
$ git init
Initialized empty Git repository in C:/Users/15L/Desktop/git-RK/git-lab/.git/

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ ls -a
./ ../ .git/

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git add gprolog
fatal: pathspec 'gprolog' did not match any files

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git add SEPM-Lab
fatal: pathspec 'SEPM-Lab' did not match any files

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git add "SEPM-Lab"
fatal: pathspec 'SEPM-Lab' did not match any files

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git add .

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   SEPM-Lab.txt
    new file:   gprolog.url

```

```

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git add SEPM-Lab
fatal: pathspec 'SEPM-Lab' did not match any files

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   SEPM_LAB-1.docx

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git commit -am "Express Commit"
[master 661b588] Express Commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 SEPM_LAB-1.docx

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git status
On branch master
nothing to commit, working tree clean

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git log
commit 661b58816ba997026a030048e096064c681b23a4 (HEAD -> master)
Author: RahulKSEPM <rahulkumhar2604@gmail.com>
Date:   Mon Feb 5 14:35:10 2024 +0530

    Express Commit

commit a20262d0a704c1423348eba0093677784e59e4fe
Author: RahulKSEPM <rahulkumhar2604@gmail.com>
Date:   Mon Feb 5 14:24:59 2024 +0530

    Initial Commit

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git log --oneline
661b588 (HEAD -> master) Express Commit
a20262d Initial Commit

```

```

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   teststatus

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git commit -am "Express Commit"
[master 08270ee] Express Commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 teststatus

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git log --oneline
08270ee (HEAD -> master) Express Commit
661b588 Express Commit
a20262d Initial Commit

15L@203-10 MINGW64 ~/desktop/git-RK/git-lab (master)
$ git remote -v

```

Conclusion:- Successfully executed git commands in git bash.