```
Last login: Tue Mar 21 21:05:56 on ttys002
Amiteshs-MBP:ds1004 amitesh$ git graph
*   62a429c (HEAD -> testing) 9th commit (4th on master , fixed merging).
|\
| * f7d2ce5 (master) 7th commit (5th on master).
| *   1d90850 6th commit (4th on master).
| |\
| * | c08acc1 5th commit (3rd on master).
* | | ebd523f 8th commit (3rd on testing).
| |/
|/|
* | 18fe355 4th commit (2nd on testing).
|/
* dba4ad5 3rd commit (1st on testing).
* 1f92f87 2nd Commit (2nd on master).
* a74a80a 1st commit ( 1st on master ).
Amiteshs-MBP:ds1004 amitesh$ echo "aks629 practice">>aks629_test.log
Amiteshs-MBP:ds1004 amitesh$ git log --graph --oneline --branches >>aks629_test.log
Amiteshs-MBP:ds1004 amitesh$ cd ..
Amiteshs-MBP:Big_Data amitesh$ mkdir lab7
Amiteshs-MBP:Big_Data amitesh$ cd lab7
Amiteshs-MBP:lab7 amitesh$ mkdir task1
Amiteshs-MBP:lab7 amitesh$ cd task1
Amiteshs-MBP:task1 amitesh$ git init .
Initialized empty Git repository in /Users/amitesh/Desktop/Big_Data/lab7/task1/.git/
Amiteshs-MBP:task1 amitesh$ ls-alp
-bash: ls-alp: command not found
Amiteshs-MBP:task1 amitesh$ ls -alp
total 0
drwxr-xr-x   3 amitesh  staff  102 Mar 22 02:30 ./
drwxr-xr-x   3 amitesh  staff  102 Mar 22 02:29 ../
drwxr-xr-x  10 amitesh  staff  340 Mar 22 02:30 .git/
Amiteshs-MBP:task1 amitesh$ ls -alp .git
total 24
drwxr-xr-x  10 amitesh  staff  340 Mar 22 02:30 ./
drwxr-xr-x   3 amitesh  staff  102 Mar 22 02:30 ../
-rw-r--r--   1 amitesh  staff   23 Mar 22 02:30 HEAD
drwxr-xr-x   2 amitesh  staff   68 Mar 22 02:30 branches/
-rw-r--r--   1 amitesh  staff  137 Mar 22 02:30 config
-rw-r--r--   1 amitesh  staff   73 Mar 22 02:30 description
drwxr-xr-x  12 amitesh  staff  408 Mar 22 02:30 hooks/
drwxr-xr-x   3 amitesh  staff  102 Mar 22 02:30 info/
drwxr-xr-x   4 amitesh  staff  136 Mar 22 02:30 objects/
drwxr-xr-x   4 amitesh  staff  136 Mar 22 02:30 refs/
Amiteshs-MBP:task1 amitesh$ git status
On branch master

Initial commit

nothing to commit (create/copy files and use "git add" to track)
Amiteshs-MBP:task1 amitesh$ echo "This is a test.">> README
Amiteshs-MBP:task1 amitesh$ git status
On branch master

Initial commit
```

```
Untracked files:
  (use "git add <file>..." to include in what will be committed)

        README

nothing added to commit but untracked files present (use "git add" to track)
Amiteshs-MBP:task1 amitesh$ git add README
Amiteshs-MBP:task1 amitesh$ git graph
git: 'graph' is not a git command. See 'git --help'.

Did you mean one of these?
        branch
        grep
Amiteshs-MBP:task1 amitesh$ git config alias.graph 'log --decorate --oneline --branche
s --graph'
Amiteshs-MBP:task1 amitesh$ git graph
fatal: your current branch 'master' does not have any commits yet
Amiteshs-MBP:task1 amitesh$ git status
On branch master

Initial commit

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

        new file:   README

Amiteshs-MBP:task1 amitesh$ git commit -m '1st commit ( 1st on master )."
>
> "
> '
[master (root-commit) 753916d] 1st commit ( 1st on master )."
 1 file changed, 1 insertion(+)
 create mode 100644 README
Amiteshs-MBP:task1 amitesh$ git staus
git: 'staus' is not a git command. See 'git --help'.

Did you mean this?
        status
Amiteshs-MBP:task1 amitesh$ git status
On branch master
nothing to commit, working tree clean
Amiteshs-MBP:task1 amitesh$ git graph
* 753916d (HEAD -> master) 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git reset HEAD README
Amiteshs-MBP:task1 amitesh$ git graph
* 753916d (HEAD -> master) 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git ls-files
README
Amiteshs-MBP:task1 amitesh$ git reset --hard HEAD~1
fatal: ambiguous argument 'HEAD~1': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'
Amiteshs-MBP:task1 amitesh$ git reset --hard HEAD~0
HEAD is now at 753916d 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git graph
```

```
* 753916d (HEAD -> master) 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git hist
git: 'hist' is not a git command. See 'git --help'.

Did you mean this?
        bisect
Amiteshs-MBP:task1 amitesh$ git status
On branch master
nothing to commit, working tree clean
Amiteshs-MBP:task1 amitesh$ git reset --hard
HEAD is now at 753916d 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git reset --hard HEAD^
fatal: ambiguous argument 'HEAD^': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'
Amiteshs-MBP:task1 amitesh$ git garph
git: 'garph' is not a git command. See 'git --help'.

Did you mean this?
        graph
Amiteshs-MBP:task1 amitesh$ git graph
* 753916d (HEAD -> master) 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git reset HEAD^
fatal: ambiguous argument 'HEAD^': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'
Amiteshs-MBP:task1 amitesh$ git commit -m "1st commit ( 1st on master )."
On branch master
nothing to commit, working tree clean
Amiteshs-MBP:task1 amitesh$ git graph
* 753916d (HEAD -> master) 1st commit ( 1st on master )."
Amiteshs-MBP:task1 amitesh$ git rebase -i
There is no tracking information for the current branch.
Please specify which branch you want to rebase against.
See git-rebase(1) for details.

    git rebase <branch>

If you wish to set tracking information for this branch you can do so with:

    git branch --set-upstream-to=<remote>/<branch> master

Amiteshs-MBP:task1 amitesh$ git rebase -i HEAD~1
fatal: Needed a single revision
invalid upstream HEAD~1
Amiteshs-MBP:task1 amitesh$ git rebase -i HEAD^1
fatal: Needed a single revision
invalid upstream HEAD^1
Amiteshs-MBP:task1 amitesh$ git commit --amend -m "1st commit ( 1st on master )."
[master 675da29] 1st commit ( 1st on master ).
 Date: Wed Mar 22 02:34:30 2017 -0400
 1 file changed, 1 insertion(+)
 create mode 100644 README
Amiteshs-MBP:task1 amitesh$ git status
On branch master
nothing to commit, working tree clean
```

```
Amiteshs-MBP:task1 amitesh$ git graph
* 675da29 (HEAD -> master) 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git branch
* master
Amiteshs-MBP:task1 amitesh$ git branch testing
Amiteshs-MBP:task1 amitesh$ git branch
* master
  testing
Amiteshs-MBP:task1 amitesh$ git checkout testing
Switched to branch 'testing'
Amiteshs-MBP:task1 amitesh$ echo "This is a test on testing branch">> TEST1
Amiteshs-MBP:task1 amitesh$ LS
README  TEST1
Amiteshs-MBP:task1 amitesh$ git log-files
git: 'log-files' is not a git command. See 'git --help'.

Did you mean this?
        ls-files
Amiteshs-MBP:task1 amitesh$ git ls-files
README
Amiteshs-MBP:task1 amitesh$ git status
On branch testing
Untracked files:
  (use "git add <file>..." to include in what will be committed)

        TEST1

nothing added to commit but untracked files present (use "git add" to track)
Amiteshs-MBP:task1 amitesh$ git add TEST1
Amiteshs-MBP:task1 amitesh$ git graph
* 675da29 (HEAD -> testing, master) 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git status
On branch testing
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        new file:   TEST1

Amiteshs-MBP:task1 amitesh$ git commit -m "2nd commit (1st on testing)."
[testing 2c4753e] 2nd commit (1st on testing).
 1 file changed, 1 insertion(+)
 create mode 100644 TEST1
Amiteshs-MBP:task1 amitesh$ git graph
* 2c4753e (HEAD -> testing) 2nd commit (1st on testing).
* 675da29 (master) 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git checkout
Amiteshs-MBP:task1 amitesh$ ls
README  TEST1
Amiteshs-MBP:task1 amitesh$ git status
On branch testing
nothing to commit, working tree clean
Amiteshs-MBP:task1 amitesh$ echo "Creating upper branch">> TEST2
Amiteshs-MBP:task1 amitesh$ git status
On branch testing
Untracked files:
  (use "git add <file>..." to include in what will be committed)
```

```
        TEST2

nothing added to commit but untracked files present (use "git add" to track)
Amiteshs-MBP:task1 amitesh$ git add
Nothing specified, nothing added.
Maybe you wanted to say 'git add .'?
Amiteshs-MBP:task1 amitesh$ git add TEST2
Amiteshs-MBP:task1 amitesh$ git branch
  master
* testing
Amiteshs-MBP:task1 amitesh$ git checkout master
A       TEST2
Switched to branch 'master'
Amiteshs-MBP:task1 amitesh$ ls
README  TEST2
Amiteshs-MBP:task1 amitesh$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        new file:   TEST2

Amiteshs-MBP:task1 amitesh$ git commit -m "3rd commit (2nd on master)."
[master 2c87f2d] 3rd commit (2nd on master).
 1 file changed, 1 insertion(+)
 create mode 100644 TEST2
Amiteshs-MBP:task1 amitesh$ git graph
* 2c87f2d (HEAD -> master) 3rd commit (2nd on master).
| * 2c4753e (testing) 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git merge -m "4th commit (3rd on master)-3Level,2Node"
fatal: No remote for the current branch.
Amiteshs-MBP:task1 amitesh$ git merge testing -m "4th commit (3rd on master)-3Level,2N
ode"
Merge made by the 'recursive' strategy.
 TEST1 | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 TEST1
Amiteshs-MBP:task1 amitesh$ graph
-bash: graph: command not found
Amiteshs-MBP:task1 amitesh$ git graph
*   8db8143 (HEAD -> master) 4th commit (3rd on master)-3Level,2Node
|\
| * 2c4753e (testing) 2nd commit (1st on testing).
* | 2c87f2d 3rd commit (2nd on master).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git checkout testing
Switched to branch 'testing'
Amiteshs-MBP:task1 amitesh$ ls
README  TEST1
Amiteshs-MBP:task1 amitesh$ vim README
Amiteshs-MBP:task1 amitesh$ git status
On branch testing
```

```
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   README

no changes added to commit (use "git add" and/or "git commit -a")
Amiteshs-MBP:task1 amitesh$ git add README
Amiteshs-MBP:task1 amitesh$ git commit -m "5th commit (2nd on testing)- 3Level,3Node"
[testing 633c960] 5th commit (2nd on testing)- 3Level,3Node
 1 file changed, 1 insertion(+)
Amiteshs-MBP:task1 amitesh$ git graph
* 633c960 (HEAD -> testing) 5th commit (2nd on testing)- 3Level,3Node
| *   8db8143 (master) 4th commit (3rd on master)-3Level,2Node
| |\
| |/
|/|
* | 2c4753e 2nd commit (1st on testing).
| * 2c87f2d 3rd commit (2nd on master).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git branch
  master
* testing
Amiteshs-MBP:task1 amitesh$ git merge master -m "6th commit (3rd on testing)-4Level,2n
ode"
Merge made by the 'recursive' strategy.
 TEST2 | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 TEST2
Amiteshs-MBP:task1 amitesh$ git graph
*   3802c0a (HEAD -> testing) 6th commit (3rd on testing)-4Level,2node
|\
| *   8db8143 (master) 4th commit (3rd on master)-3Level,2Node
| |\
| * | 2c87f2d 3rd commit (2nd on master).
* | | 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
|/|
* | 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git log
commit 3802c0a09465648d5bc5aa2b0c27fbff57b25f95
Merge: 633c960 8db8143
Author: amiteshsah <aks629@nyu.edu>
Date:   Wed Mar 22 03:35:54 2017 -0400

    6th commit (3rd on testing)-4Level,2node

commit 633c960ba2e8c388041ef0af60079f80a95369aa
Author: amiteshsah <aks629@nyu.edu>
Date:   Wed Mar 22 03:31:14 2017 -0400

    5th commit (2nd on testing)- 3Level,3Node
```

```
commit 8db8143e329e667ef19d366b734db49418e79c98
Merge: 2c87f2d 2c4753e
Author: amiteshsah <aks629@nyu.edu>
Date:   Wed Mar 22 03:27:15 2017 -0400

    4th commit (3rd on master)-3Level,2Node

commit 2c87f2d384073aeb5b63b16055c3c7640e696223
Author: amiteshsah <aks629@nyu.edu>
Date:   Wed Mar 22 03:17:33 2017 -0400

    3rd commit (2nd on master).

commit 2c4753efb77bd6cc753be08cedd98fd9ae5826a9
Author: amiteshsah <aks629@nyu.edu>
Date:   Wed Mar 22 03:10:54 2017 -0400

    2nd commit (1st on testing).

commit 675da2942cac20e07861d8540aea265b22eb31a4
Author: amiteshsah <aks629@nyu.edu>
Date:   Wed Mar 22 02:34:30 2017 -0400

    1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git branch
  master
* testing
Amiteshs-MBP:task1 amitesh$ git checkout 2c87f2d384073aeb5b63b16055c3c7640e696223
Note: checking out '2c87f2d384073aeb5b63b16055c3c7640e696223'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by performing another checkout.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -b with the checkout command again. Example:

  git checkout -b <new-branch-name>

HEAD is now at 2c87f2d... 3rd commit (2nd on master).
Amiteshs-MBP:task1 amitesh$ git graph
*   3802c0a (testing) 6th commit (3rd on testing)-4Level,2node
|\
| *   8db8143 (master) 4th commit (3rd on master)-3Level,2Node
| |\
| * | 2c87f2d (HEAD) 3rd commit (2nd on master).
* | | 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
|/|
* | 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ ls
README  TEST2
Amiteshs-MBP:task1 amitesh$ vi TEST2
Amiteshs-MBP:task1 amitesh$ git commit -m "7th commit (4th on testing on checkout) - 3
```

```
Level, 1Node"
HEAD detached at 2c87f2d
Changes not staged for commit:
        modified:   TEST2

no changes added to commit
Amiteshs-MBP:task1 amitesh$ git status
HEAD detached at 2c87f2d
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   TEST2

no changes added to commit (use "git add" and/or "git commit -a")
Amiteshs-MBP:task1 amitesh$ git add TEST2
Amiteshs-MBP:task1 amitesh$ git commit -m "7th commit (4th on testing on checkout) - 3
Level, 1Node"
[detached HEAD d18cb82] 7th commit (4th on testing on checkout) - 3Level, 1Node
 1 file changed, 1 insertion(+)
Amiteshs-MBP:task1 amitesh$ git graph
*   3802c0a (testing) 6th commit (3rd on testing)-4Level,2node
|\
| *   8db8143 (master) 4th commit (3rd on master)-3Level,2Node
| |\
| * | 2c87f2d 3rd commit (2nd on master).
* | | 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
|/|
* | 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git checkout testing
Warning: you are leaving 1 commit behind, not connected to
any of your branches:

  d18cb82 7th commit (4th on testing on checkout) - 3Level, 1Node

If you want to keep it by creating a new branch, this may be a good time
to do so with:

 git branch <new-branch-name> d18cb82

Switched to branch 'testing'
Amiteshs-MBP:task1 amitesh$  git branch newbranch  d18cb82
Amiteshs-MBP:task1 amitesh$ git branch
  master
  newbranch
* testing
Amiteshs-MBP:task1 amitesh$ git graph
* d18cb82 (newbranch) 7th commit (4th on testing on checkout) - 3Level, 1Node
| *   3802c0a (HEAD -> testing) 6th commit (3rd on testing)-4Level,2node
| |\
| | *   8db8143 (master) 4th commit (3rd on master)-3Level,2Node
| | |\
| |/ /
```

```
|/| |
* | | 2c87f2d 3rd commit (2nd on master).
| * | 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
| * 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git branch master
fatal: A branch named 'master' already exists.
Amiteshs-MBP:task1 amitesh$ git checkout master
Switched to branch 'master'
Amiteshs-MBP:task1 amitesh$ git graph
* d18cb82 (newbranch) 7th commit (4th on testing on checkout) - 3Level, 1Node
| *   3802c0a (testing) 6th commit (3rd on testing)-4Level,2node
| |\
| | *   8db8143 (HEAD -> master) 4th commit (3rd on master)-3Level,2Node
| | |\
| |/ /
|/| |
* | | 2c87f2d 3rd commit (2nd on master).
| * | 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
| * 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git merge newbranch -m "8th commit (5th on testing)-4 Leve
l, 1Node"
Merge made by the 'recursive' strategy.
 TEST2 | 1 +
 1 file changed, 1 insertion(+)
Amiteshs-MBP:task1 amitesh$ git graph
*   aee7085 (HEAD -> master) 8th commit (5th on testing)-4 Level, 1Node
|\
| * d18cb82 (newbranch) 7th commit (4th on testing on checkout) - 3Level, 1Node
| | *   3802c0a (testing) 6th commit (3rd on testing)-4Level,2node
| | |\
| |_|/
|/| |
* | |   8db8143 4th commit (3rd on master)-3Level,2Node
|\ \ \
| |/ /
|/| |
* | | 2c87f2d 3rd commit (2nd on master).
| | * 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
| * 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git commit --amend -m "8th commit (5th on master) -4 Level
, 1Node"
[master 2e18601] 8th commit (5th on master) -4 Level, 1Node
 Date: Wed Mar 22 04:27:31 2017 -0400
Amiteshs-MBP:task1 amitesh$ git graph
*   2e18601 (HEAD -> master) 8th commit (5th on master) -4 Level, 1Node
|\
| * d18cb82 (newbranch) 7th commit (4th on testing on checkout) - 3Level, 1Node
```

```
| | *    3802c0a (testing) 6th commit (3rd on testing)-4Level,2node
| | |\
| |_|/
|/| |
* | |    8db8143 4th commit (3rd on master)-3Level,2Node
|\ \ \
| |/ /
|/| |
* | | 2c87f2d 3rd commit (2nd on master).
| | * 633c960 5th commit (2nd on testing)- 3Level,3Node
| |/
| * 2c4753e 2nd commit (1st on testing).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ git branch
* master
  newbranch
  testing
Amiteshs-MBP:task1 amitesh$ git merge testing -m "9th commit (6th on master )- 5 Level
, 1 Node"
Merge made by the 'recursive' strategy.
 README | 1 +
 1 file changed, 1 insertion(+)
Amiteshs-MBP:task1 amitesh$ git graph
*    f042d21 (HEAD -> master) 9th commit (6th on master )- 5 Level, 1 Node
|\
| *    3802c0a (testing) 6th commit (3rd on testing)-4Level,2node
| |\
| * | 633c960 5th commit (2nd on testing)- 3Level,3Node
* | |    2e18601 8th commit (5th on master) -4 Level, 1Node
|\ \ \
| |_|/
|/| |
| * | d18cb82 (newbranch) 7th commit (4th on testing on checkout) - 3Level, 1Node
* | |    8db8143 4th commit (3rd on master)-3Level,2Node
|\ \ \
| |/ /
|/| /
| |/
| * 2c4753e 2nd commit (1st on testing).
* | 2c87f2d 3rd commit (2nd on master).
|/
* 675da29 1st commit ( 1st on master ).
Amiteshs-MBP:task1 amitesh$ echo "aks629">aks629.log
Amiteshs-MBP:task1 amitesh$ git log --graph --oneline --branches >> aks629.log
Amiteshs-MBP:task1 amitesh$ git commit --all --amend
[master c03e46d] 9th commit (6th on master )- 5 Level, 1 Node
 Date: Wed Mar 22 04:32:21 2017 -0400
Amiteshs-MBP:task1 amitesh$
```