

GIT GROUP ASSIGNMENT

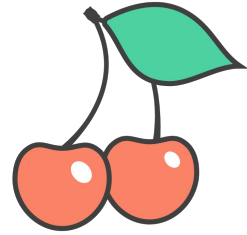


Topic - Cherry-Picking

GROUP 11

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Cherry-Picking Command



Cherry picking command is used to pick any git commit by using reference and append it to the working directory.

Basic Syntax -

git cherry-pick <commit-reference>

Why Cherry-Pick ?

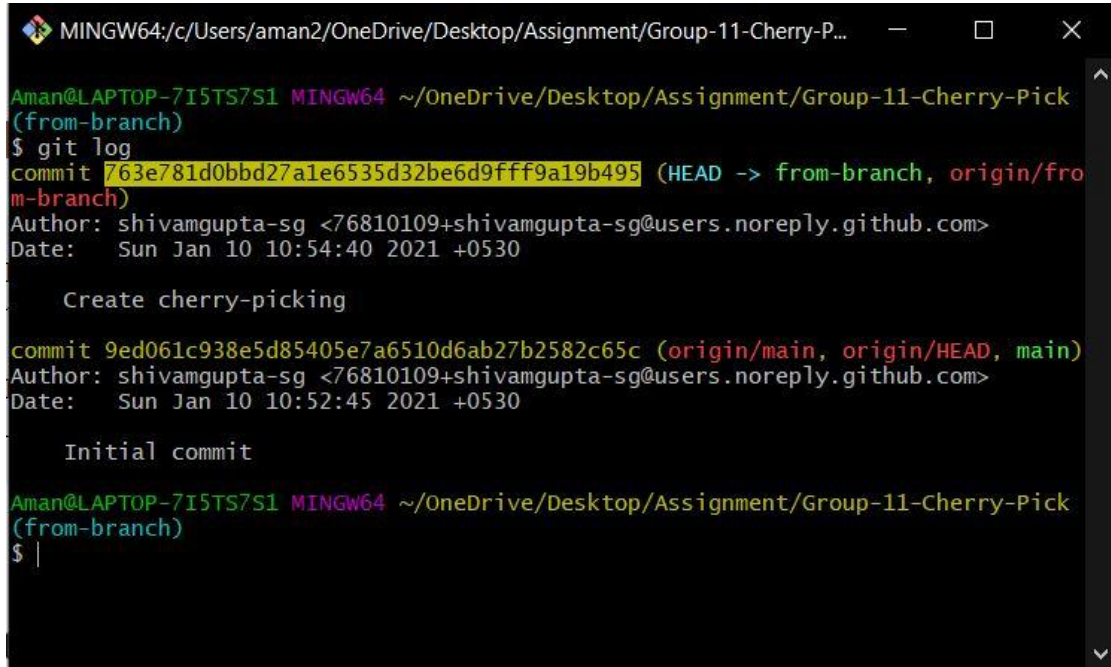
- It can help in applying changes committed in wrong branch accidentally.
- Apply some changes from other branch to your branch.
- If merge is not possible due to incompatible versions of the branches.

Steps for git cherry-pick

1. `git checkout <branch name from which we have to pick commit from>.`
2. `git log` - To get the commit reference of the commit you have to pick.
3. `git checkout <branch name to which commit has to be applied>.`
4. `git cherry-pick <commit reference>.`

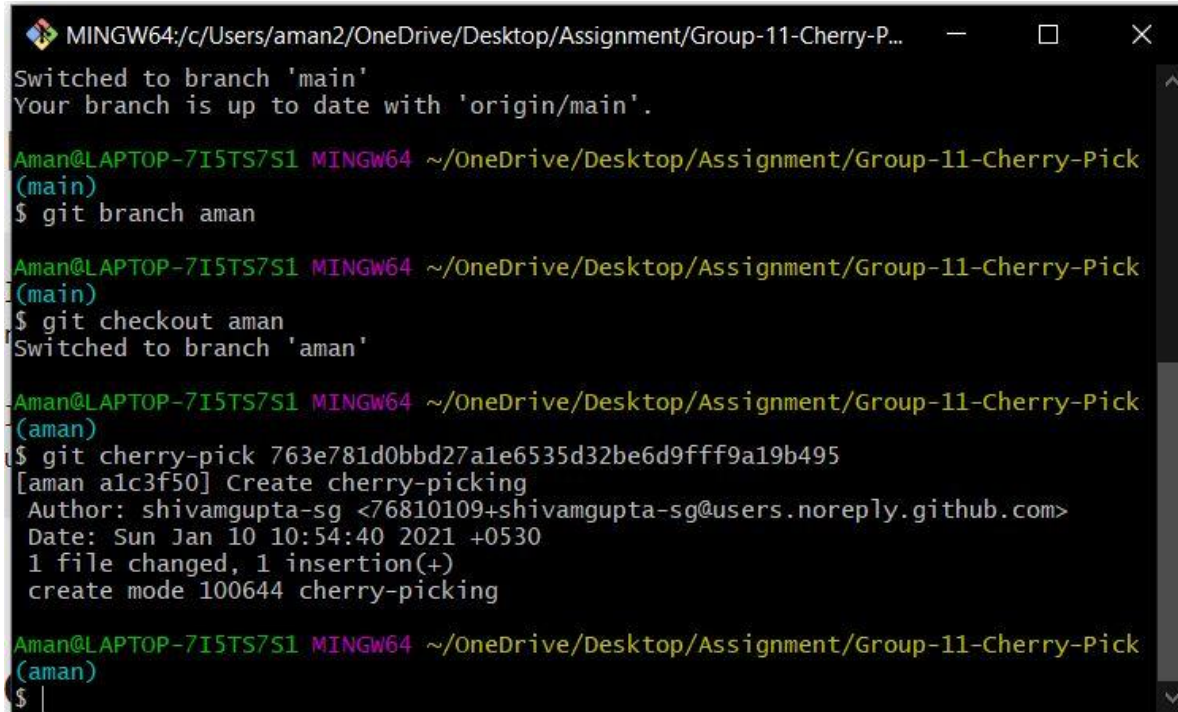
Getting the reference of commit

We can get the reference for commit by using git log command

A screenshot of a Windows command prompt window. The title bar shows the path "MINGW64:/c/Users/aman2/OneDrive/Desktop/Assignment/Group-11-Cherry-P...". The prompt is "Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick (from-branch)". The user has entered the command "\$ git log". The output shows two commits. The first commit has a hash "763e781d0bbd27a1e6535d32be6d9fff9a19b495" highlighted in yellow, and its message is "Create cherry-picking". The second commit has a hash "9ed061c938e5d85405e7a6510d6ab27b2582c65c" and its message is "Initial commit". Both commits list the author as "shivamgupta-sg" and the date as "Sun Jan 10 10:54:40 2021 +0530" and "Sun Jan 10 10:52:45 2021 +0530" respectively. The prompt is now "\$ |".

```
MINGW64:/c/Users/aman2/OneDrive/Desktop/Assignment/Group-11-Cherry-P... Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick (from-branch) $ git log commit 763e781d0bbd27a1e6535d32be6d9fff9a19b495 (HEAD -> from-branch, origin/from-branch) Author: shivamgupta-sg <76810109+shivamgupta-sg@users.noreply.github.com> Date: Sun Jan 10 10:54:40 2021 +0530 Create cherry-picking commit 9ed061c938e5d85405e7a6510d6ab27b2582c65c (origin/main, origin/HEAD, main) Author: shivamgupta-sg <76810109+shivamgupta-sg@users.noreply.github.com> Date: Sun Jan 10 10:52:45 2021 +0530 Initial commit Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick (from-branch) $ |
```

Example for cherry-pick



```
MINGW64:/c/Users/aman2/OneDrive/Desktop/Assignment/Group-11-Cherry-P...  —  □  ×
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick
(main)
$ git branch aman

Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick
(main)
$ git checkout aman
Switched to branch 'aman'

Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick
(aman)
$ git cherry-pick 763e781d0bbd27a1e6535d32be6d9fff9a19b495
[aman a1c3f50] Create cherry-picking
Author: shivamgupta-sg <76810109+shivamgupta-sg@users.noreply.github.com>
Date: Sun Jan 10 10:54:40 2021 +0530
1 file changed, 1 insertion(+)
create mode 100644 cherry-picking

Aman@LAPTOP-7I5TS7S1 MINGW64 ~/OneDrive/Desktop/Assignment/Group-11-Cherry-Pick
(aman)
$
```

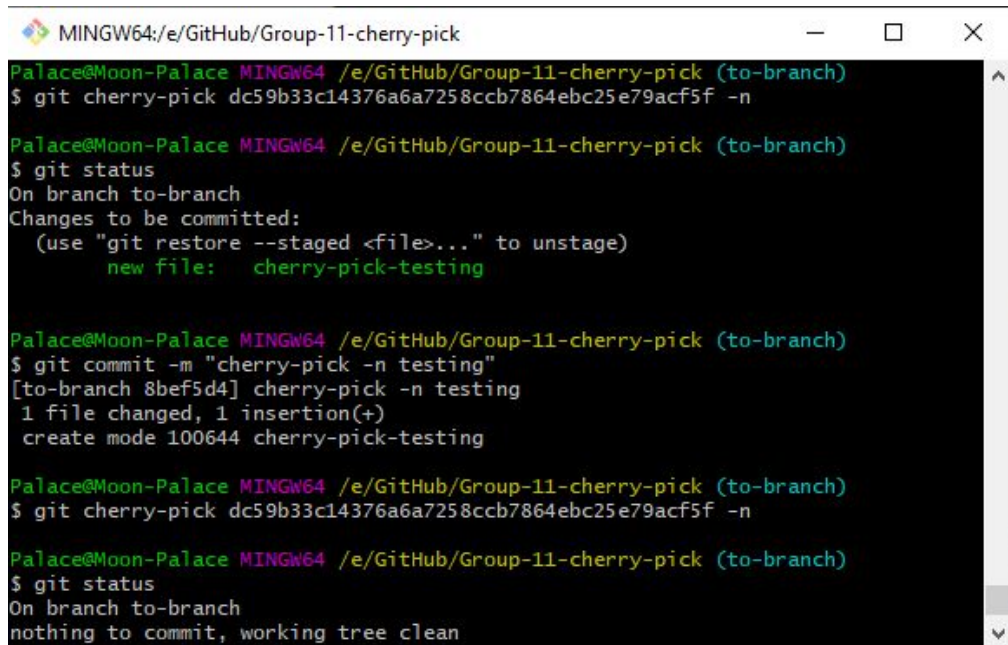
Other options in cherry-pick command

-n or --no-commit : Brings the changes of the commit to the staged area of current branch but no commit it.

-e or --edit : Lets you edit the commit message prior to commit.

-x : Appends a line “(cherry picked from commit ...)” to the original commit message, indicating from where commit is picked from. Only for the commits cherry-picked from public branch.

-n or --no-commit

A terminal window titled 'MINGW64:/e/GitHub/Group-11-cherry-pick' showing a sequence of git commands. The user performs a cherry-pick with the -n flag, checks the status, commits with -m, and then cherry-picks the commit again with -n. The final status shows the working tree is clean.

```
MINGW64:/e/GitHub/Group-11-cherry-pick
Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git cherry-pick dc59b33c14376a6a7258ccb7864ebc25e79acf5f -n

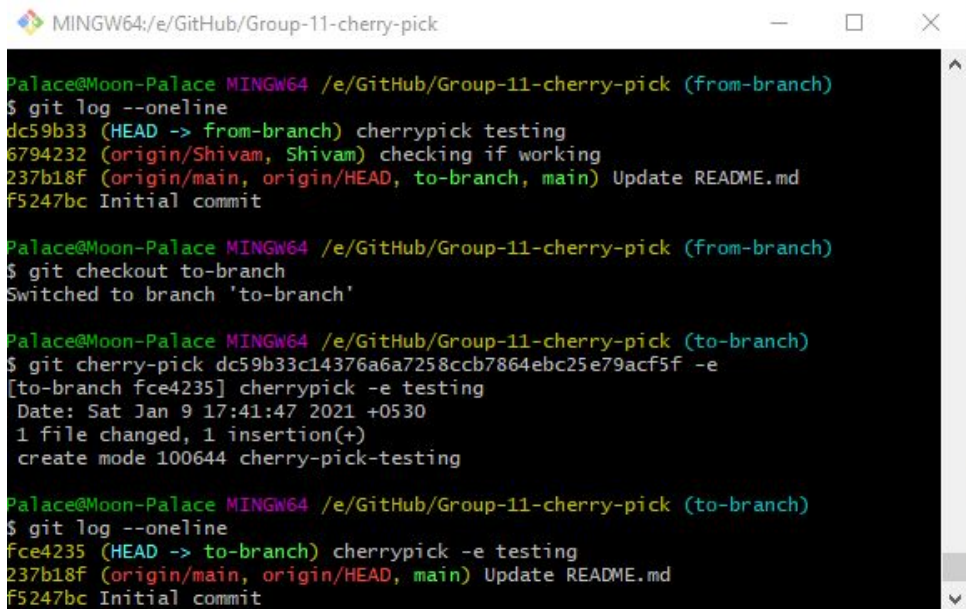
Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git status
On branch to-branch
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   cherry-pick-testing

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git commit -m "cherry-pick -n testing"
[to-branch 8bef5d4] cherry-pick -n testing
1 file changed, 1 insertion(+)
 create mode 100644 cherry-pick-testing

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git cherry-pick dc59b33c14376a6a7258ccb7864ebc25e79acf5f -n

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git status
On branch to-branch
nothing to commit, working tree clean
```


-e or --edit



```
MINGW64:/e/GitHub/Group-11-cherry-pick

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (from-branch)
$ git log --oneline
dc59b33 (HEAD -> from-branch) cherrypick testing
6794232 (origin/Shivam, Shivam) checking if working
237b18f (origin/main, origin/HEAD, to-branch, main) Update README.md
f5247bc Initial commit

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (from-branch)
$ git checkout to-branch
Switched to branch 'to-branch'

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git cherry-pick dc59b33c14376a6a7258ccb7864ebc25e79acf5f -e
[to-branch fce4235] cherrypick -e testing
Date: Sat Jan 9 17:41:47 2021 +0530
1 file changed, 1 insertion(+)
create mode 100644 cherry-pick-testing

Palace@Moon-Palace MINGW64 /e/GitHub/Group-11-cherry-pick (to-branch)
$ git log --oneline
fce4235 (HEAD -> to-branch) cherrypick -e testing
237b18f (origin/main, origin/HEAD, main) Update README.md
f5247bc Initial commit
```

Git cherry-pick <code> --signoff

The “git cherry-pick <code> --signoff “ command just add a line of signature of the person who make the changes after the commit message . (as shown in screenshot attached) .

```
Utkarsh Upadhyay@Utkarsh-UPdhyay MINGW64 /g/Workspace/Group-11-cherry-pick (utkarsh_branch)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Utkarsh Upadhyay@Utkarsh-UPdhyay MINGW64 /g/Workspace/Group-11-cherry-pick (main)
$ git cherry-pick 2642b0bdceb937bfcdd4f8e0e6f5f5eda63441bf --signoff
[main 36f82dd] Second Commit
Date: Sat Jan 9 23:58:35 2021 +0530
1 file changed, 3 insertions(+), 1 deletion(-)

Utkarsh Upadhyay@Utkarsh-UPdhyay MINGW64 /g/Workspace/Group-11-cherry-pick (main)
$ git log
commit 36f82dd24aa88556ee13966d59a83cbe1d5d0fed (HEAD -> main)
Author: utkarshup11 <utkarsh.upadhyay@knoldus>
Date: Sat Jan 9 23:58:35 2021 +0530

    Second Commit

Signed-off-by: utkarshup11 <utkarsh.upadhyay@knoldus>

commit cfee8a8ffe1ab3d8f00d6c46772f591da8f19036 (origin/main, origin/HEAD)
Author: utkarshup11 <utkarsh.upadhyay@knoldus>
Date: Sat Jan 9 23:37:43 2021 +0530

    This is my first commit

commit 987b0731d63c5e60dd80de0bfe12a1f602f377b0
Author: shivamgupta-sg <76810109+shivamgupta-sg@users.noreply.github.com>
Date: Sat Jan 9 16:45:50 2021 +0530

    Update README.md

commit 237b18f51afbfc94cb8a9f2ccbc4d32797071ed
Author: shivamgupta-sg <76810109+shivamgupta-sg@users.noreply.github.com>
Date: Sat Jan 9 15:17:17 2021 +0530

    Update README.md

commit f5247bcf2919d8869a96c26c75ab4dd568c59b1f
Author: shivamgupta-sg <76810109+shivamgupta-sg@users.noreply.github.com>
Date: Sat Jan 9 15:15:11 2021 +0530

    Initial commit
```

Some Usage Of Cherry-Pick

1. We can avoid useless conflicts by using git cherry-pick instead of other options.
2. It is used to access the changes introduced to a sub-branch, without changing the branch.
3. Most of the time we use cherry-pick to restore the commits which we lost .
4. Sometimes for undoing the changes made we have to apply cherry-pick.

Link for the Group Repository

[shivamgupta-sg/Group-11-Cherry-Pick: Git Group Assignment - Group 11 \(github.com\)](https://github.com/shivamgupta-sg/Group-11-Cherry-Pick)