

Q. How to combine two commits into one commit? For Example, you have 4 different commits C1, C2, C3, and C4 and you to combine C2 and C3 into one single commit.

> To combine two or more commits into one single commit we can use :

```
$ git rebase -i HEAD~n
```

Here n is the number of commits from the head that need to be merged.

Below is the demonstration of the rebase command :

 MINGW64:/c/Users/Jayant Ghadge/git_test

```
Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ notepad newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git add newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git diff newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git add newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ notepad newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git diff newfile.txt
diff --git a/newfile.txt b/newfile.txt
index 98a745c..8a430ca 100644
--- a/newfile.txt
+++ b/newfile.txt
@@ -1,4 +1,5 @@
 This is a newfile will be added to a local reporsitry
 One line was removed
 this line was added after removing another line
+this line was also added

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git add newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git commit -m "This is commit C1"
[master f40b4ed] This is commit C1
1 file changed, 3 insertions(+), 1 deletion(-)
```

MINGW64:/c/Users/Jayant Ghadge/git_test

```
Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ notepad newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git diff newfile.txt
diff --git a/newfile.txt b/newfile.txt
index 8a430ca..e018336 100644
--- a/newfile.txt
+++ b/newfile.txt
@@ -2,4 +2,5 @@ This is a newfile will be added to a local reporsitry
  One line was removed
  this line was added after removing another line
  this line was also added
+Another line was also added

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git add .

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git commit -m "This is commit C2"
[master 9a5f564] This is commit C2
 1 file changed, 1 insertion(+)

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ !
```

MINGW64:/c/Users/Jayant Ghadge/git_test

```
Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ notepad newfile.txt

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git diff newfile.txt
diff --git a/newfile.txt b/newfile.txt
index e018336..9ada9f5 100644
--- a/newfile.txt
+++ b/newfile.txt
@@ -1,6 +1,7 @@
  This is a newfile will be added to a local reporsitry
-One line was removed
+
+  this line was added after removing another line
  this line was also added
  Another line was also added
+This line now added

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git add .

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git commit -m "This is commit C3"
[master 7d96bbd] This is commit C3
 1 file changed, 2 insertions(+), 1 deletion(-)

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ !
```

MINGW64:/c/Users/Jayant Ghadge/git_test

```
Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git log
commit 7d96bbd70da755ea2a72c9edc09b3e3766e7159b (HEAD -> master)
Author: ghadgejayant12 <jayant.ghadge@joshsoftware.com>
Date: Thu Jan 5 15:58:31 2023 +0530

    This is commit C3

commit 9a5f5649497a0bc00659047f214efae25c94cd97
Author: ghadgejayant12 <jayant.ghadge@joshsoftware.com>
Date: Thu Jan 5 15:56:53 2023 +0530

    This is commit C2

commit f40b4ed50db30aa13434d9cd58d9b0081b5b0d91
Author: ghadgejayant12 <jayant.ghadge@joshsoftware.com>
Date: Thu Jan 5 15:55:20 2023 +0530

    This is commit C1
```

MINGW64:/c/Users/Jayant Ghadge/git_test

```
Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~
$ cd git_test

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master|REBASE)
$ git rebase -i HEAD~3
```

MINGW64:/c/Users/Jayant Ghadge/git_test

```
[detached HEAD 0516fa8] This is commit C1
Date: Thu Jan 5 15:55:20 2023 +0530
1 file changed, 6 insertions(+), 2 deletions(-)
Successfully rebased and updated refs/heads/master.

Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$
```

MINGW64:/c/Users/Jayant Ghadge/git_test

```
Jayant Ghadge@LAPTOP-N04E9TJ8 MINGW64 ~/git_test (master)
$ git log
commit 0516fa89776d1d2292c599d9886bef411afc2534 (HEAD -> master)
Author: ghadgejayant12 <jayant.ghadge@joshsoftware.com>
Date: Thu Jan 5 15:55:20 2023 +0530

    This is commit C1

    This is commit C2

    This is commit C3

commit 2df738575e63b754413340e84a6fe5d8e89d46d6
Author: ghadgejayant12 <jayant.ghadge@joshsoftware.com>
Date: Thu Jan 5 15:49:45 2023 +0530

    created a new commit
```