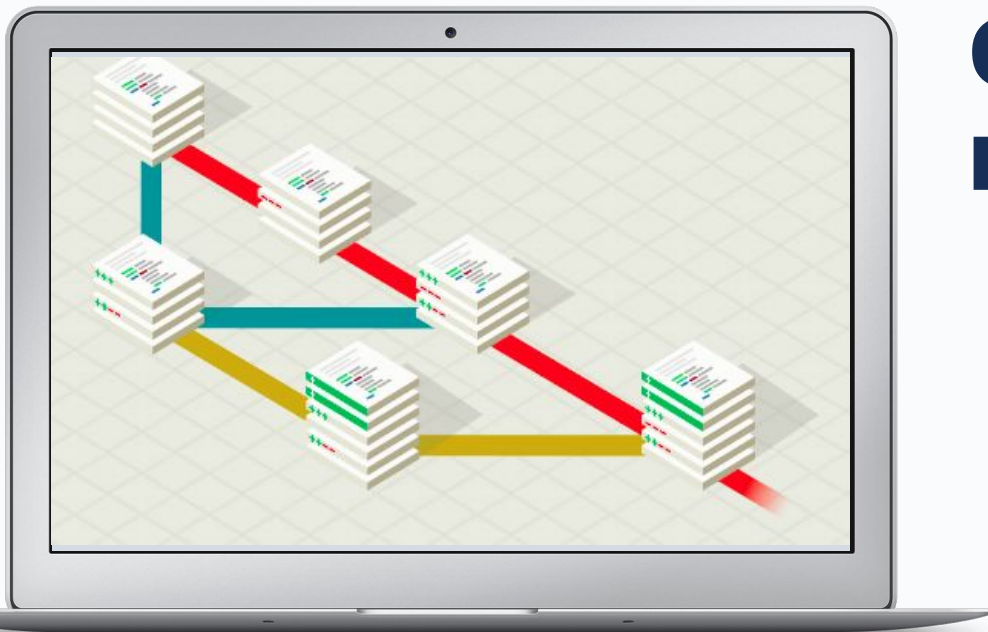




# Become QA Auto

## GIT. Злиття гілок

Бутенко Сергій





# План лекції



Злиття гілок

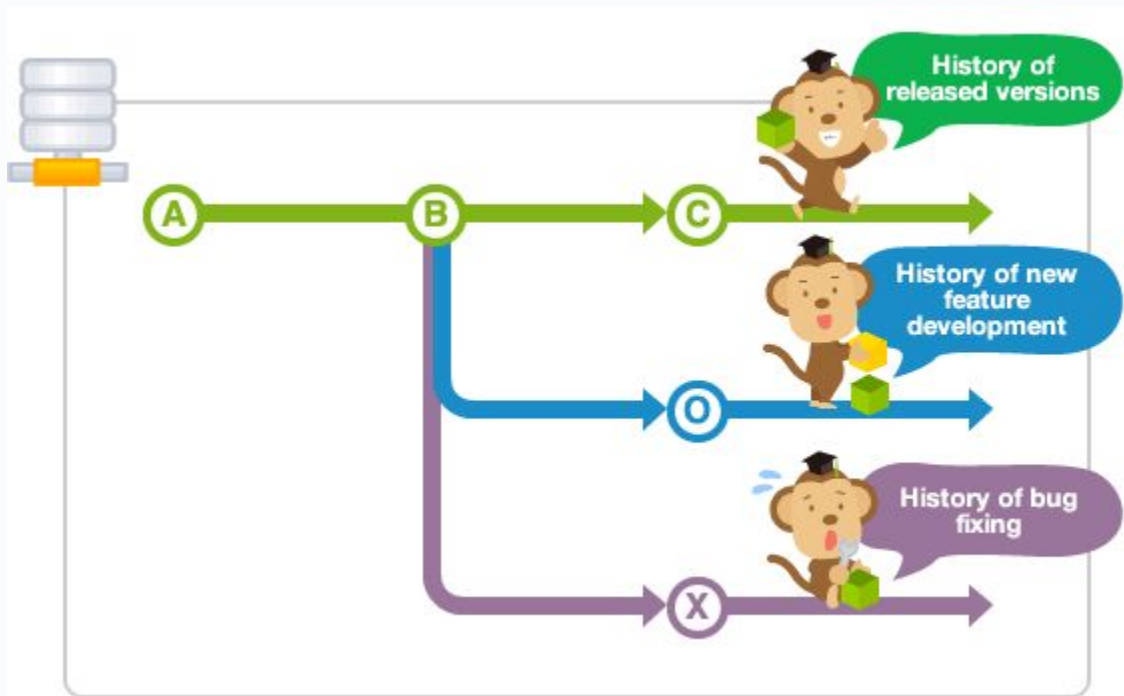


Злиття гілок з розгалуженою історією



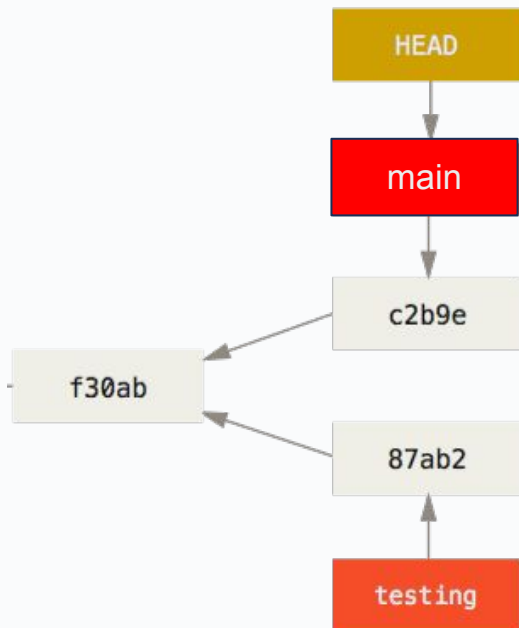
Видалення гілок

## Злиття гілок





# Операція злиття

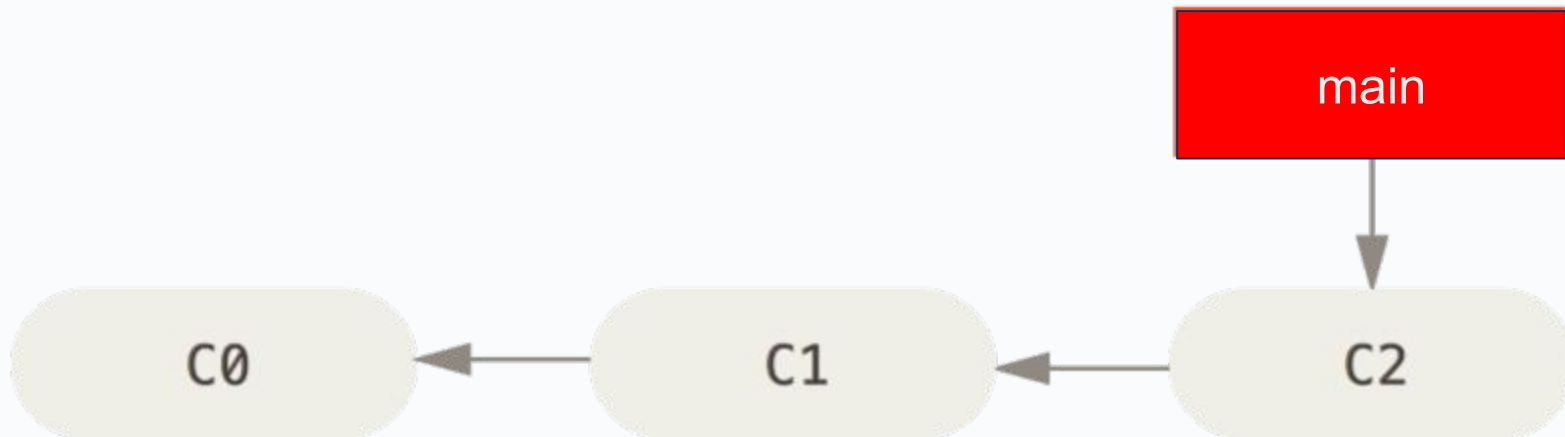


Операція **злиття (merge)** - це операція, після якої різні версії файлів з двох різних гілок опиняються в одній із них.

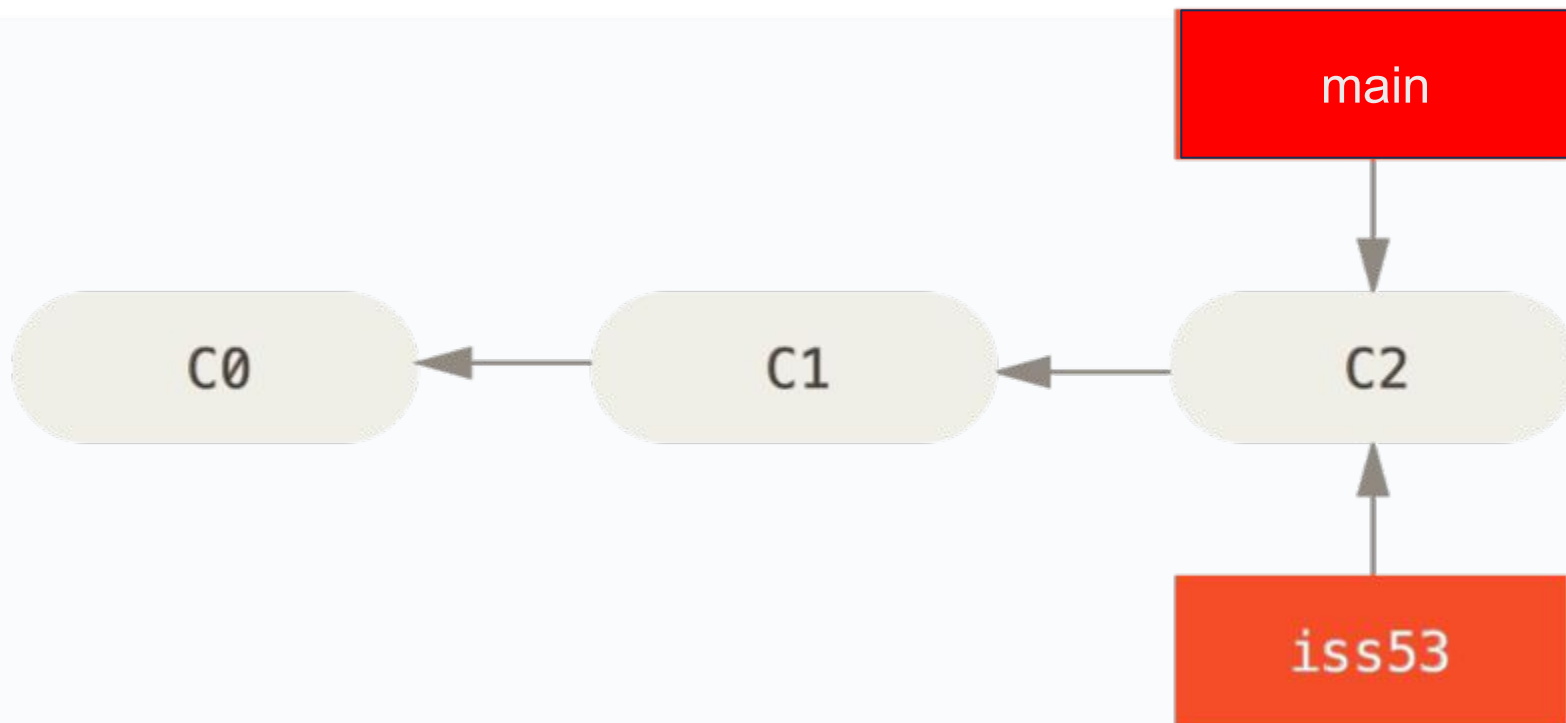
## Синтаксис

`git merge "ім'я гілки, яку ви хочете злити з активною"`

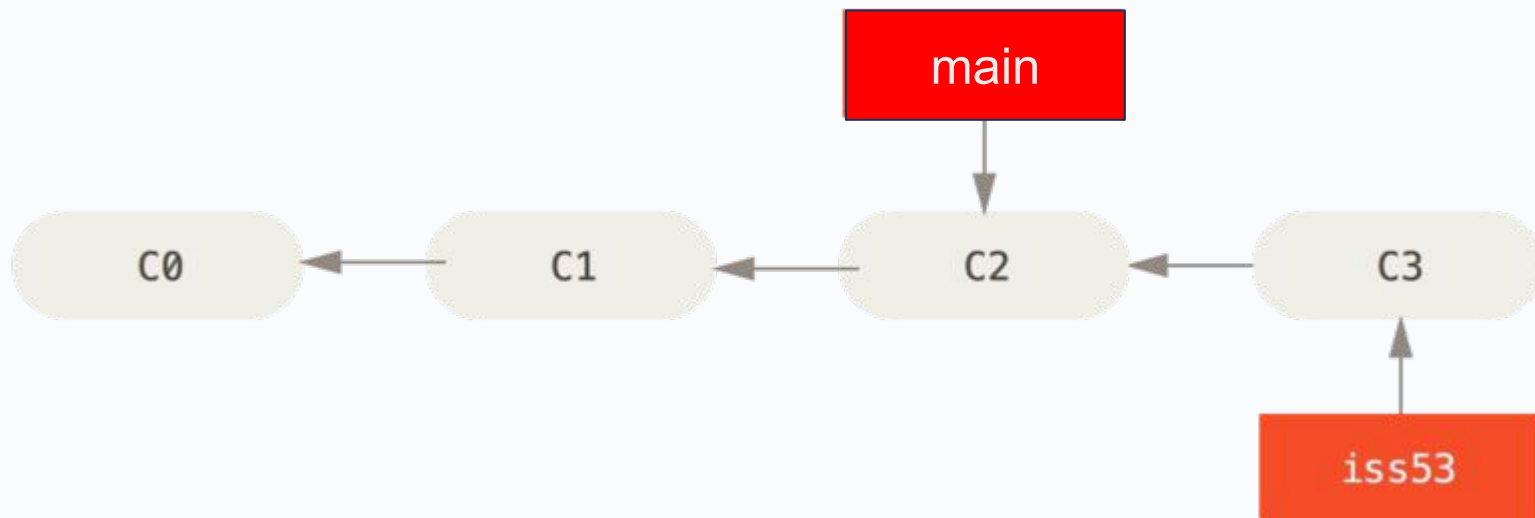
## ◎ Злиття гілок з розгалуженою історією



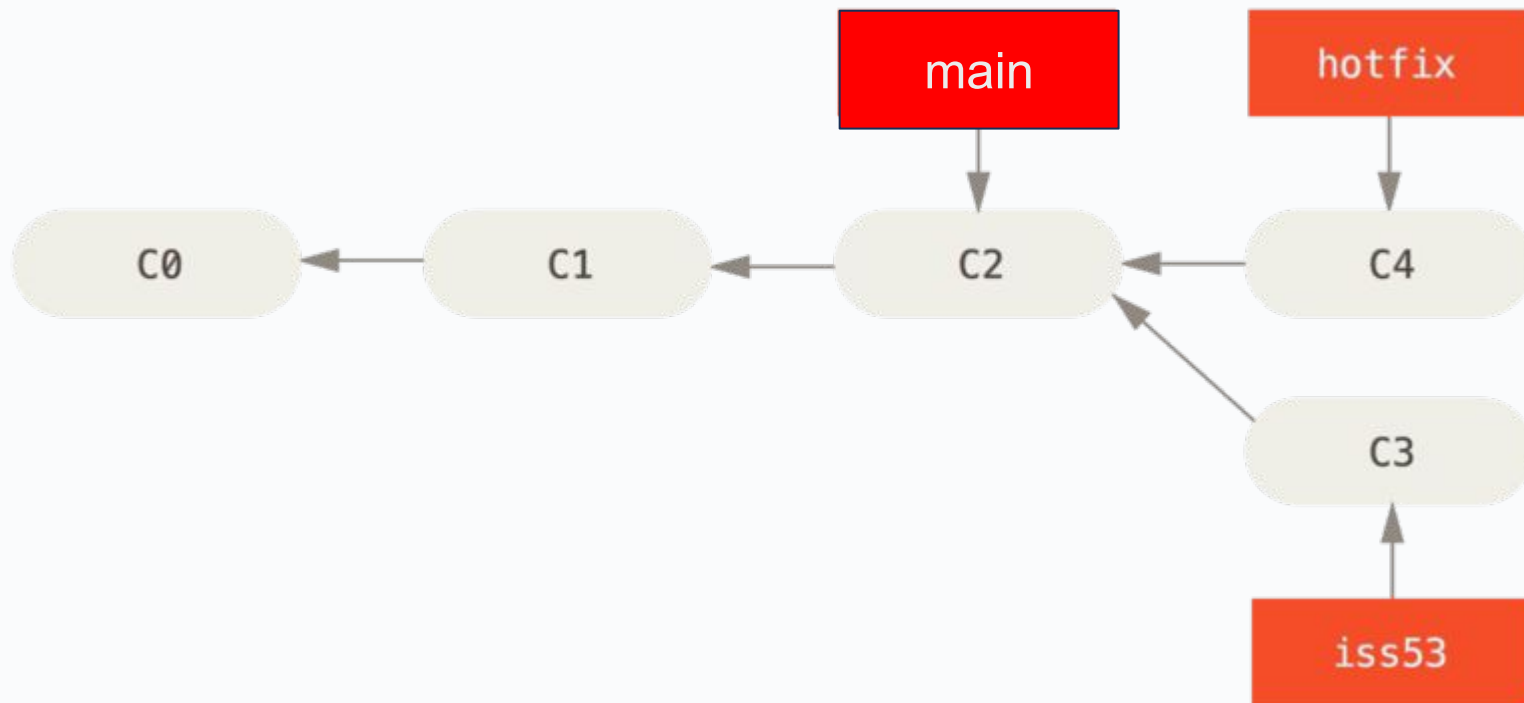
## ◎ Злиття гілок



## ◎ Злиття гілок

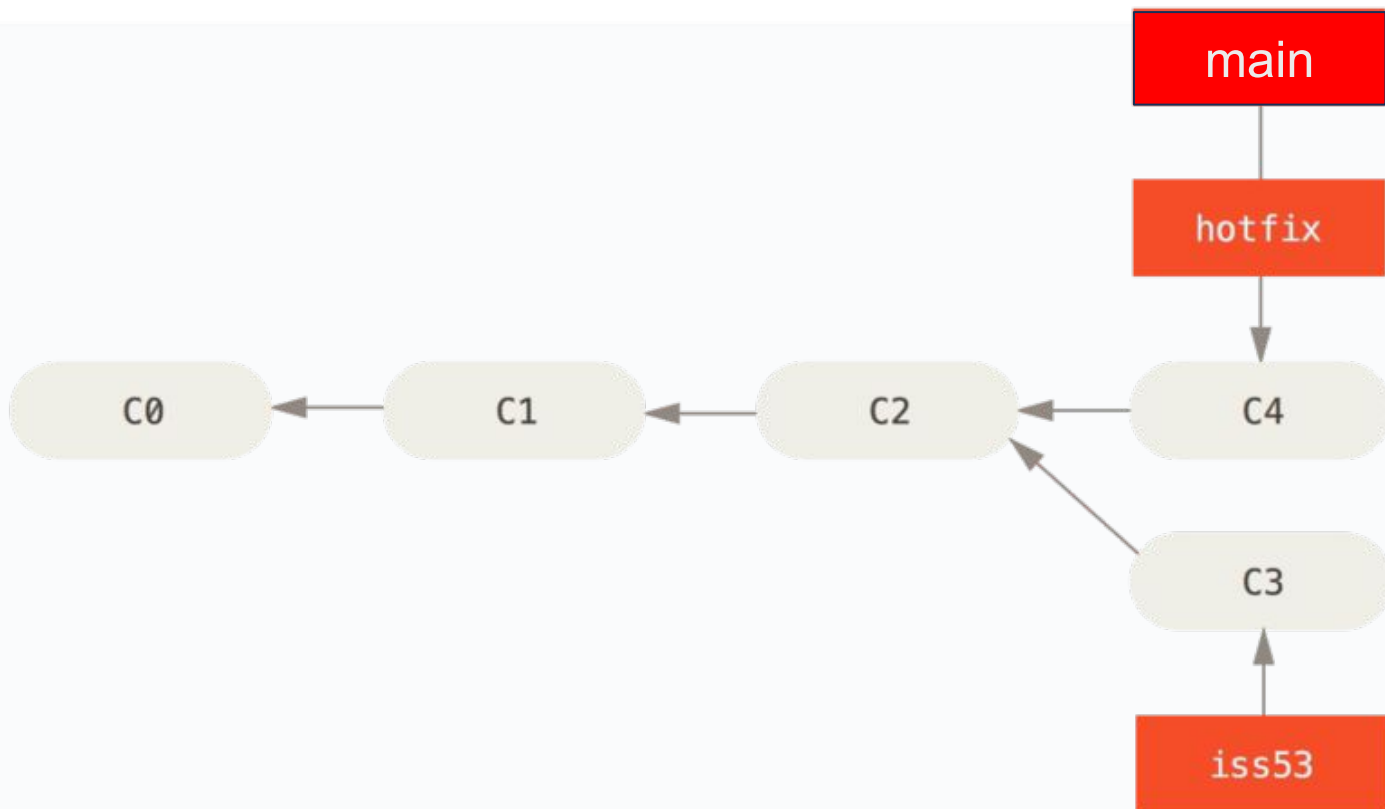


## ◎ Злиття гілок

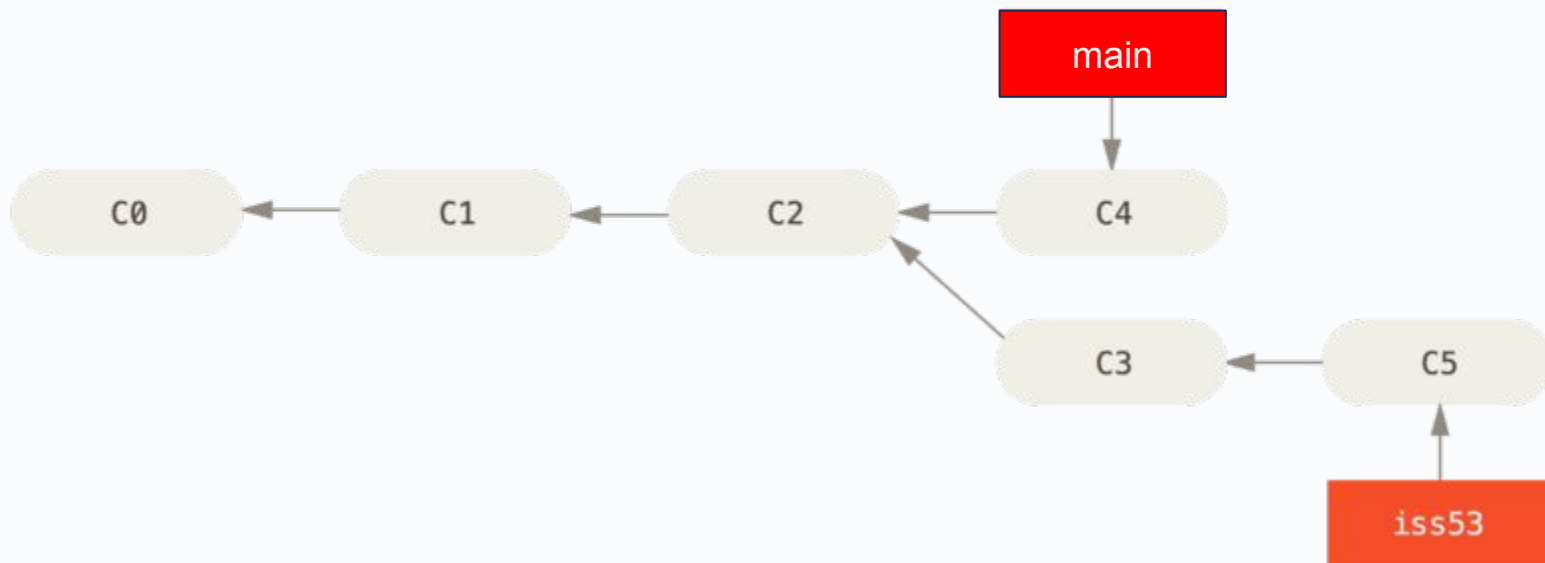




## ◎ Злиття гілок

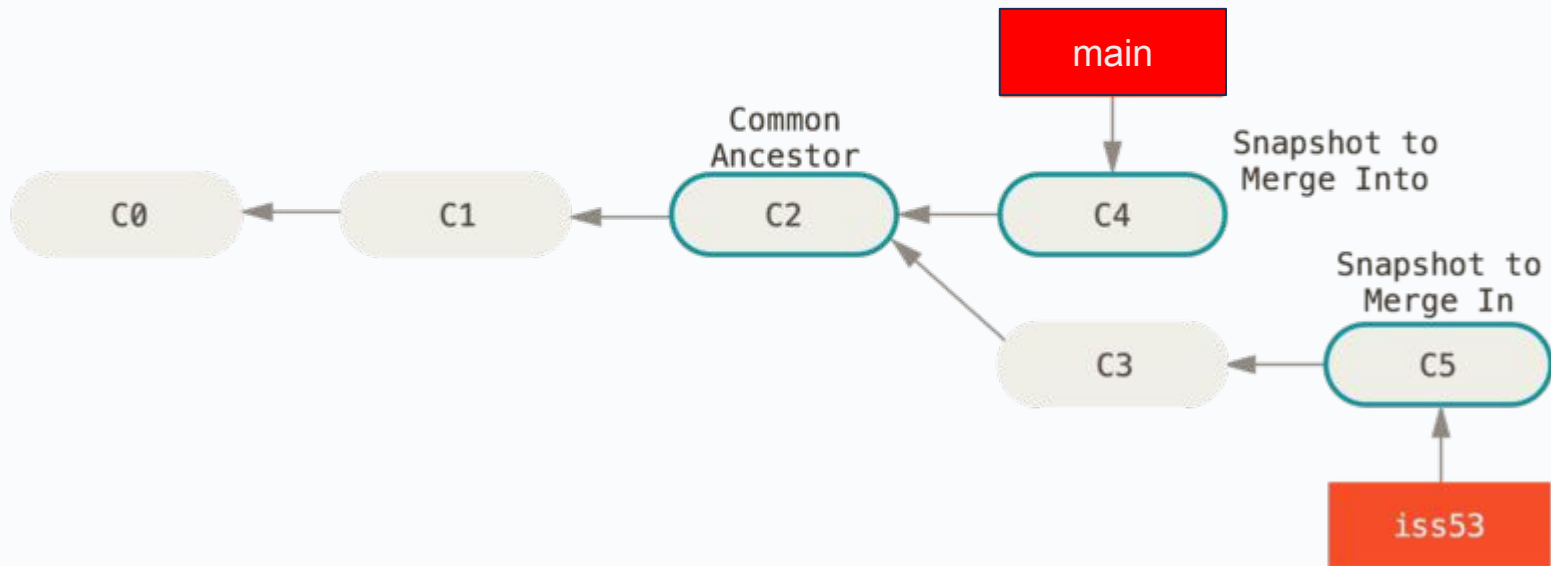


## ◎ Злиття гілок

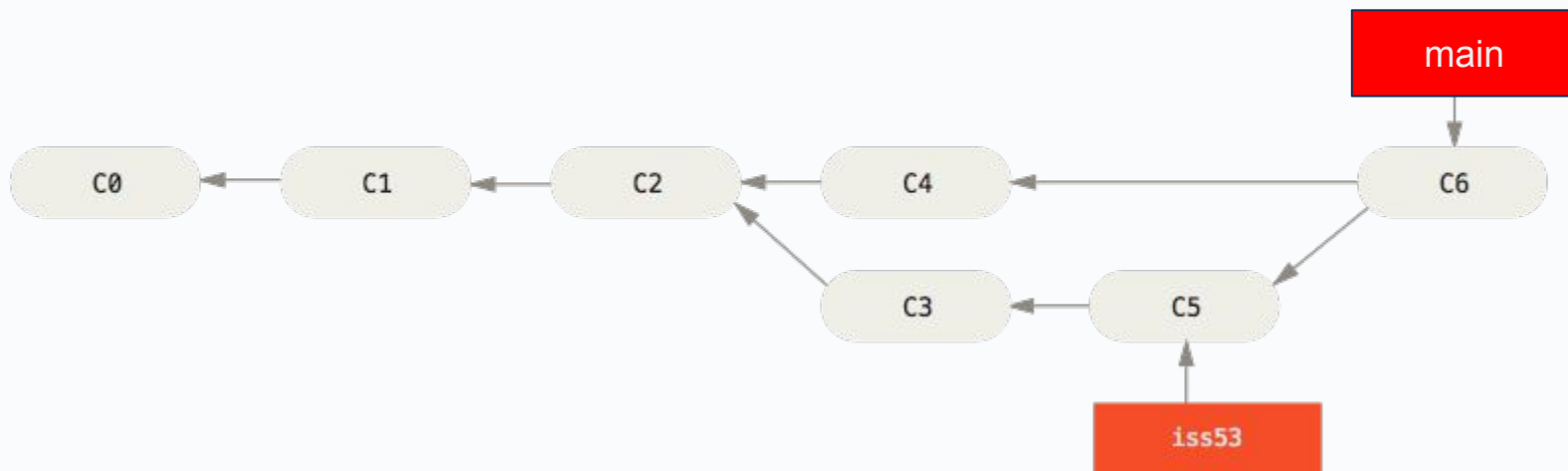




# Злиття гілок



## Злиття гілок





# Злиття гілок



MINGW64:/c/Users/sergii.butenko/furry-waddle

```
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~  
$ cd furry-waddle/  
  
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)  
$ git checkout main  
Already on 'main'  
Your branch is based on 'origin/main', but the upstream is gone.  
  (use "git branch --unset-upstream" to fixup)  
  
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)  
$ |
```



## Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git branch iss53

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git checkout iss53
Switched to branch 'iss53'

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git status
On branch iss53
nothing to commit, working tree clean

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git log --oneline --graph --all
* 9fdb733 (HEAD -> iss53, main) Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$
```



# Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ echo iss53 >> iss53.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ ls
iss53.txt  main_file.txt  new_text_file.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git status
On branch iss53
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    iss53.txt

nothing added to commit but untracked files present (use "git add" to track)

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git add iss53.txt
warning: in the working copy of 'iss53.txt', LF will be replaced by CRLF the next time Git touches it

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$
```



## Злиття гілок



MINGW64:/c/Users/sergii.butenko/furry-waddle

```
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git commit -m "First step on iss53"
[iss53 e4ffc2e] First step on iss53
1 file changed, 1 insertion(+)
create mode 100644 iss53.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git log --oneline --graph --all
* e4ffc2e (HEAD -> iss53) First step on iss53
* 9fdb73 (main) Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ |
```





# Злиття гілок



MINGW64:/c/Users/sergii.butenko/furry-waddle



```
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git checkout main
Switched to branch 'main'
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)
```

```
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ ls
main_file.txt  new_text_file.txt
```

```
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git log --oneline --graph --all
* e4ffc2e (iss53) First step on iss53
* 9fdb73 (HEAD -> main) Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit
```

```
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ |
```



## Злиття гілок



```
MINGW64/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git branch hotfix

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git checkout hotfix
Switched to branch 'hotfix'

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ echo hotfix >> hotfix.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ ls
hotfix.txt  main_file.txt  new_text_file.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ git status
On branch hotfix
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    hotfix.txt

nothing added to commit but untracked files present (use "git add" to track)

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ |
```



# Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle
sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ git add hotfix.txt
warning: in the working copy of 'hotfix.txt', LF will be replaced by CRLF the next time Git touches it

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ git commit -m "Added changes for hotfix"
[hotfix 1a781fa] Added changes for hotfix
1 file changed, 1 insertion(+)
create mode 100644 hotfix.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ git log --oneline --graph --all
* 1a781fa (HEAD -> hotfix) Added changes for hotfix
| * e4ffc2e (iss53) First step on iss53
|/
* 9fdb73 (main) Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$
```



## Злиття гілок



```
MINGW64/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (hotfix)
$ git checkout main
Switched to branch 'main'
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git merge hotfix
Updating 9fdb73..1a781fa
Fast-forward
 hotfix.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 hotfix.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git log --oneline --graph --all
* 1a781fa (HEAD -> main, hotfix) Added changes for hotfix
| * e4ffc2e (iss53) First step on iss53
|/
* 9fdb73 Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
```



## Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git checkout iss53
Switched to branch 'iss53'

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ ls
iss53.txt  main_file.txt  new_text_file.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ echo second_step >> iss53.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git status
On branch iss53
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:   iss53.txt

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

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ |
```





# Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git add iss53.txt
warning: in the working copy of 'iss53.txt', LF will be replaced by CRLF the next time Git touches it

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git commit -m "Last step of iss53"
[iss53 bfe5585] Last step of iss53
1 file changed, 1 insertion(+)

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git log --oneline --graph --all
* bfe5585 (HEAD -> iss53) Last step of iss53
* e4ffc2e First step on iss53
| * 1a781fa (main, hotfix) Added changes for hotfix
|/
* 9fdb73 Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$
```



## Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (iss53)
$ git checkout main
Switched to branch 'main'
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git merge iss53
Merge made by the 'ort' strategy.
 iss53.txt | 2 ++
 1 file changed, 2 insertions(+)
 create mode 100644 iss53.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ ls
hotfix.txt  iss53.txt  main_file.txt  new_text_file.txt

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$
```

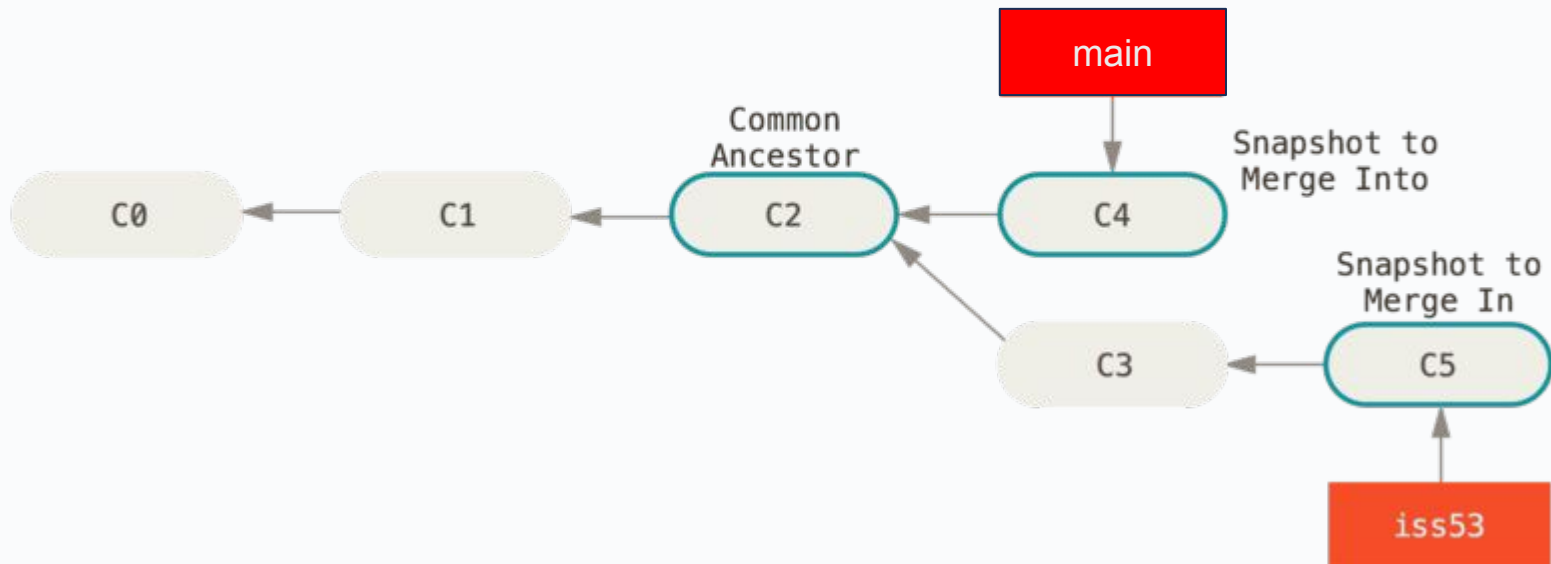


## Злиття гілок

[illegible]



## Злиття гілок





# Злиття гілок



```
MINGW64:/c/Users/sergii.butenko/furry-waddle

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ git log --oneline --graph --all
* 2960793 (HEAD -> main) Merge branch 'iss53'
| \
| * bfe5585 (iss53) Last step of iss53
| * e4ffc2e First step on iss53
* | 1a781fa (hotfix) Added changes for hotfix
|/
* 9fdb73 Added changes to main branch
| * 5ce3e31 (testing) Added changes to testing branch
|/
* 83e6603 My very first commit

sergii.butenko@KBP1-LHP-A00394 MINGW64 ~/furry-waddle (main)
$ |
```



# Підсумки



Операція **злиття (merge)** - це операція, після якої різні версії файлів з двох різних гілок опиняються в одній із них



## **Синтаксис**

`git merge` "ім'я гілки, яку ви хочете злити з активною"



Для того, щоб злити дві гілки, потрібно визначити імена гілок, які ви зливаєте, та порядок злиття