

Branching and merging in git

Andrei Chis



Branching is like
“Save as...”
on an entire
directory

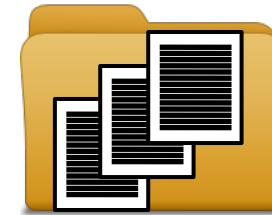
master



master

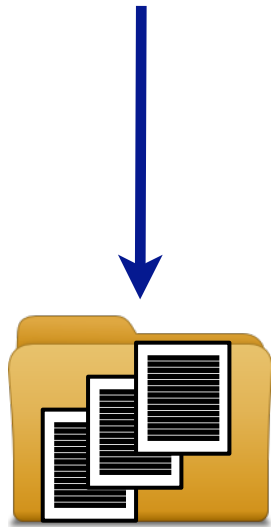


exercise1

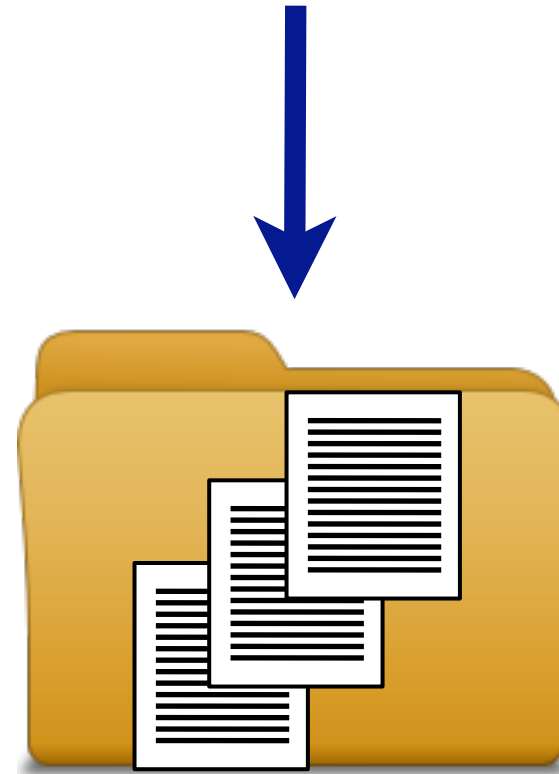


create branch

master

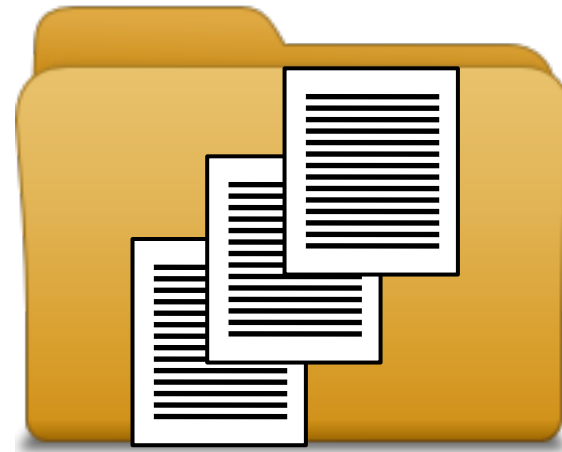


exercise1

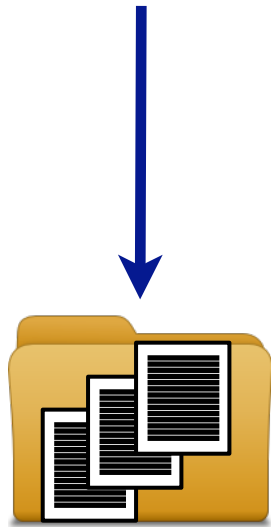


**when switching branches
the entire content of the
folder is replaced**

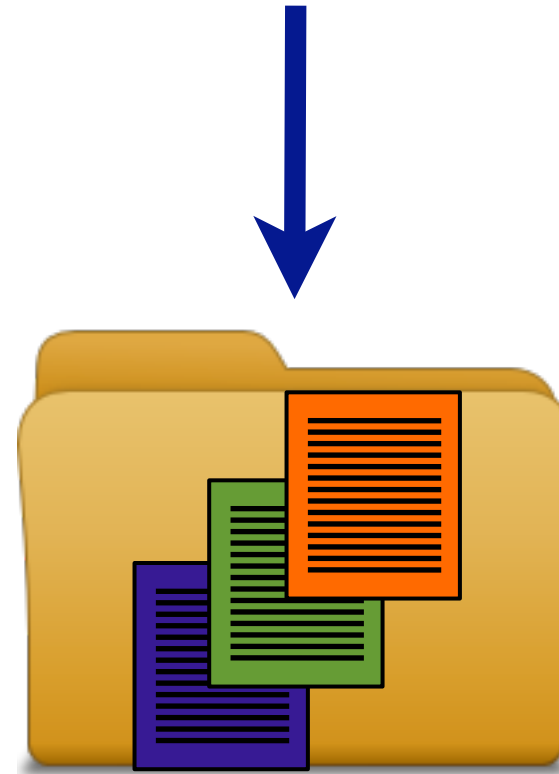
exercise1



master



exercise1

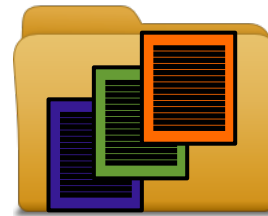


**edit files
in branch**

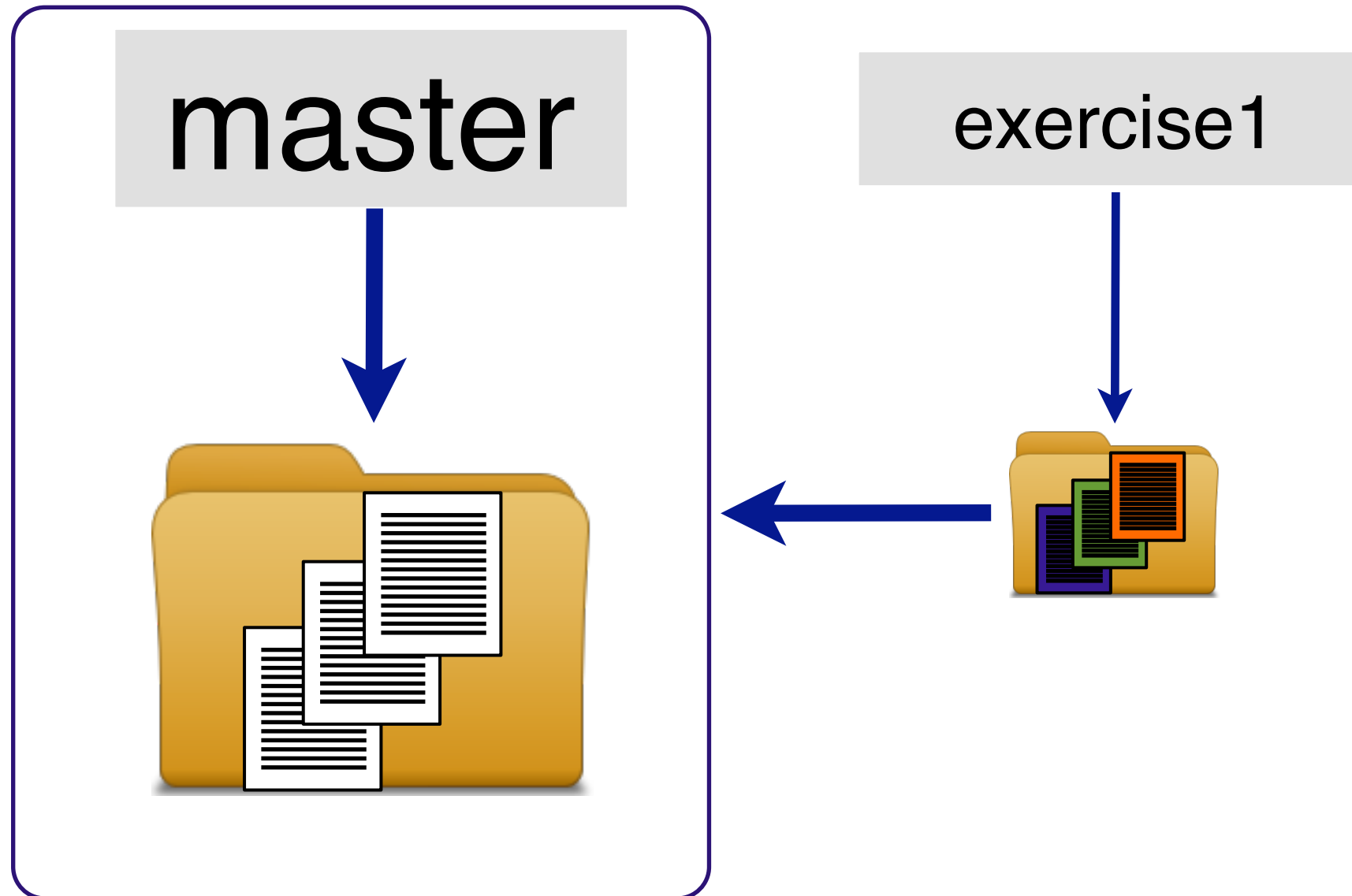
master



exercise1

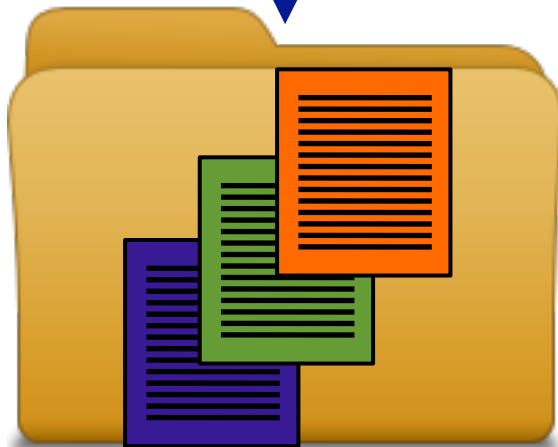


**switch to
master branch**

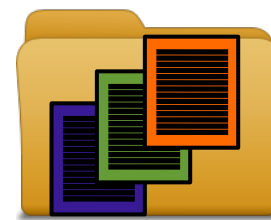


**merge with
exercise1 branch**

master



exercise1

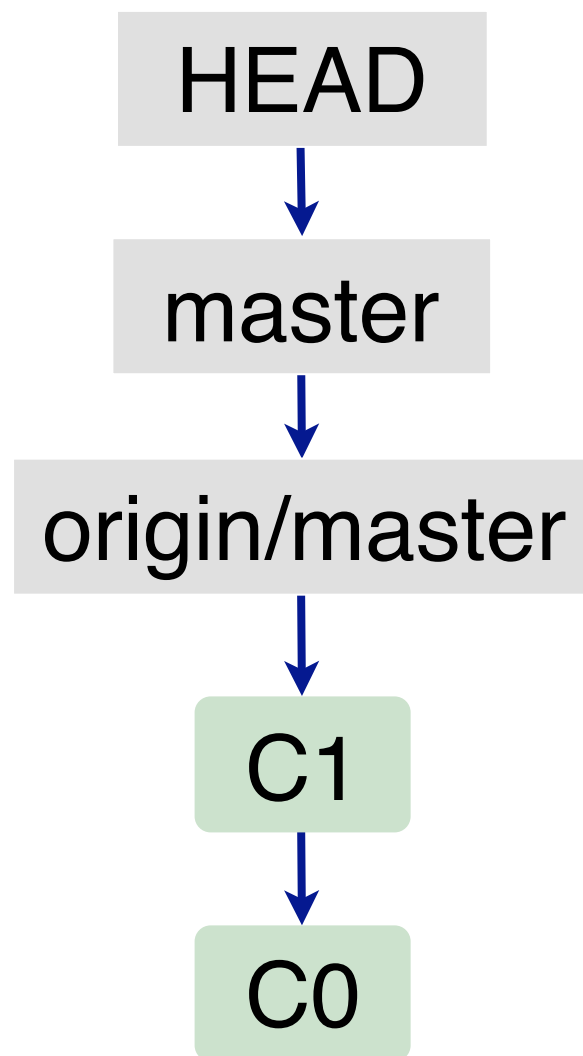


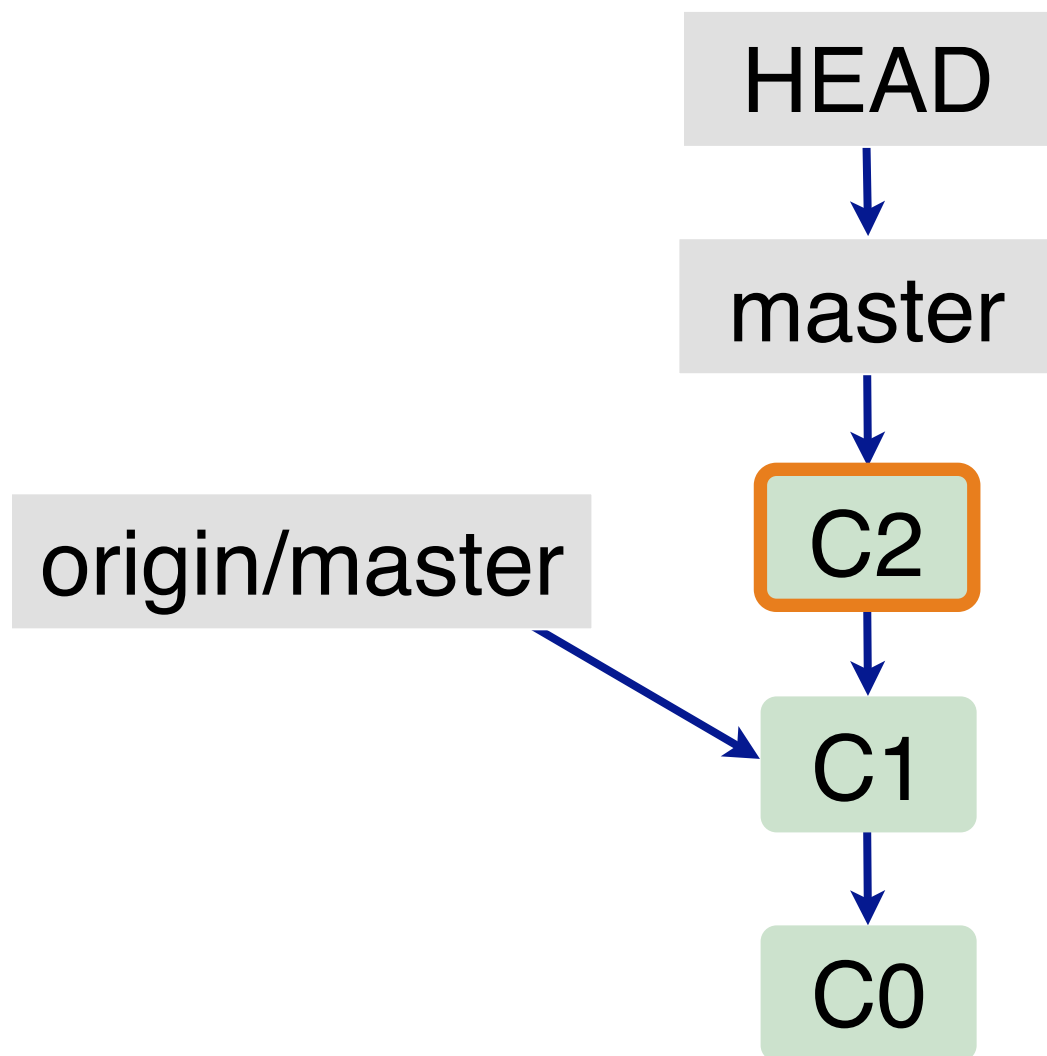
**new version in
master branch**

**only one branch is
active at a time**

**and now branching
in git**

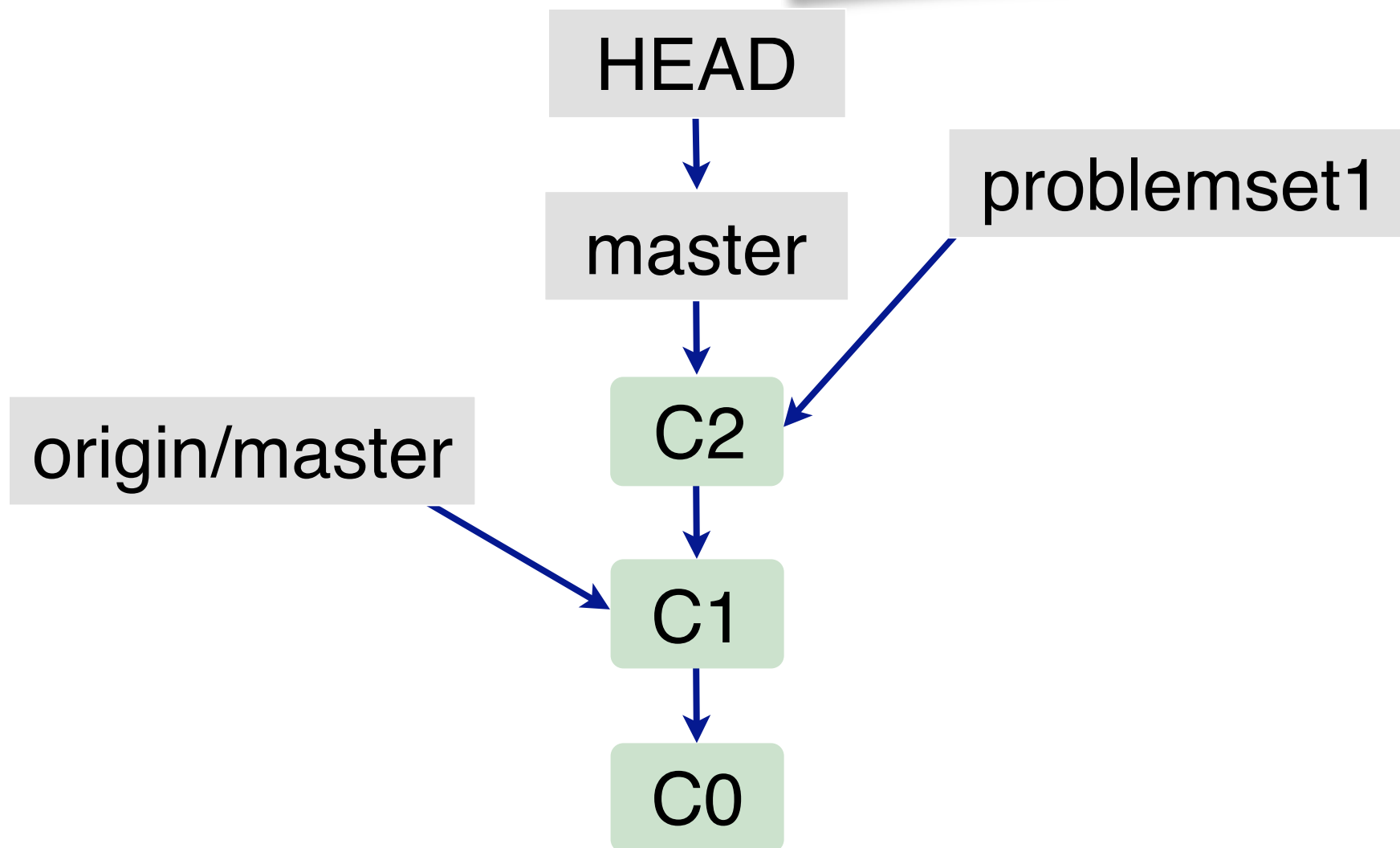
“origin” refers to the
remote repo



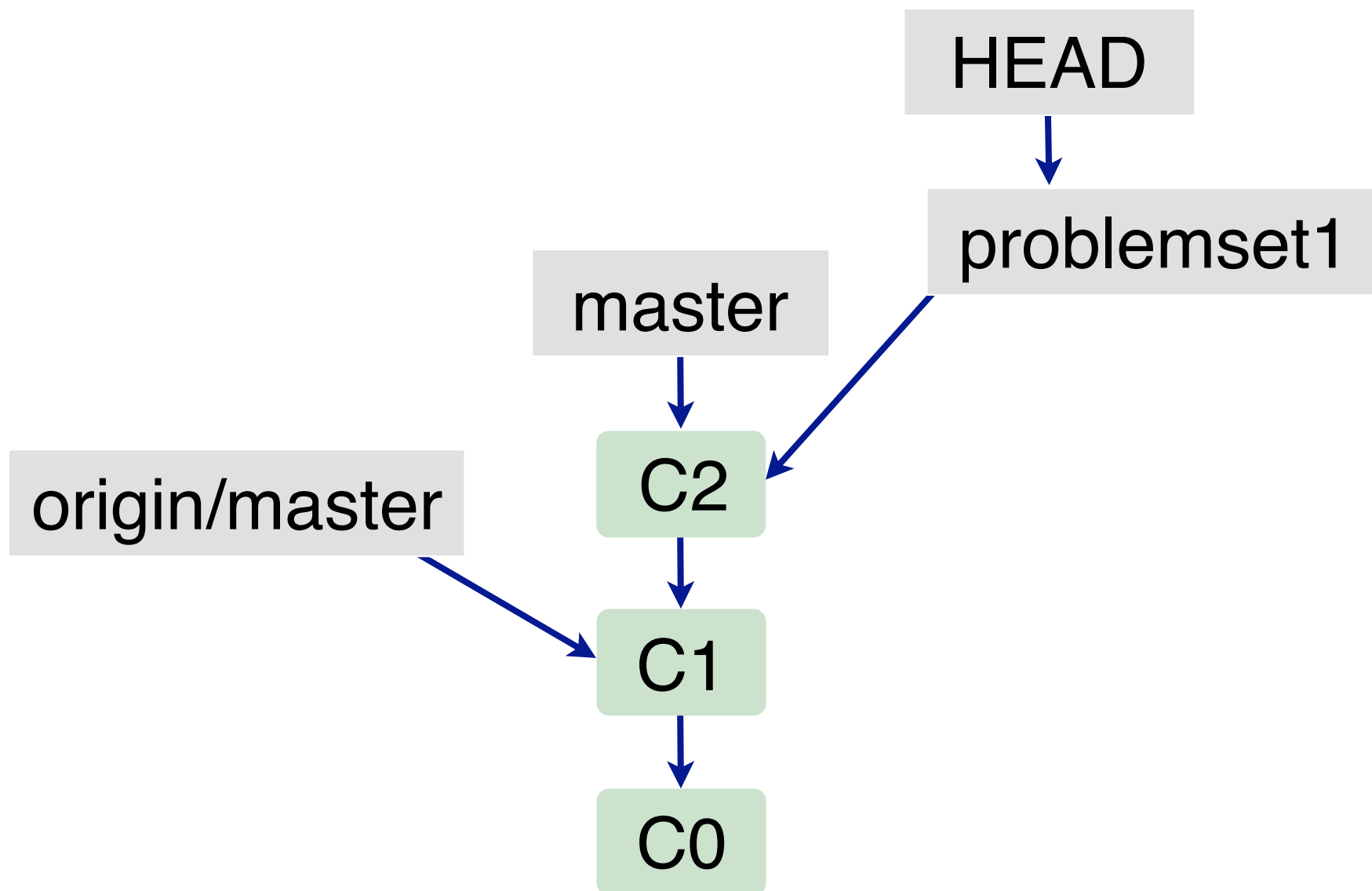


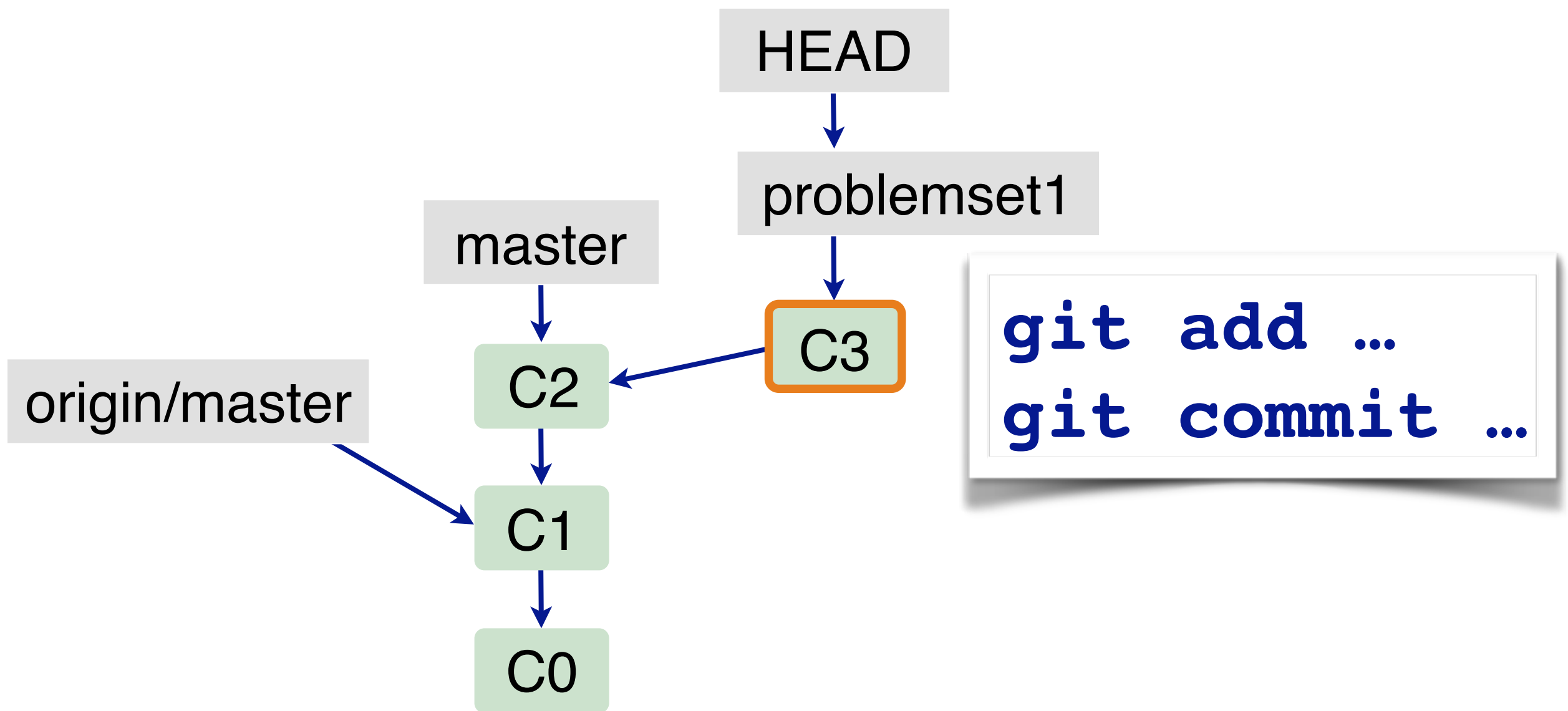
```
git add ...  
git commit ...
```

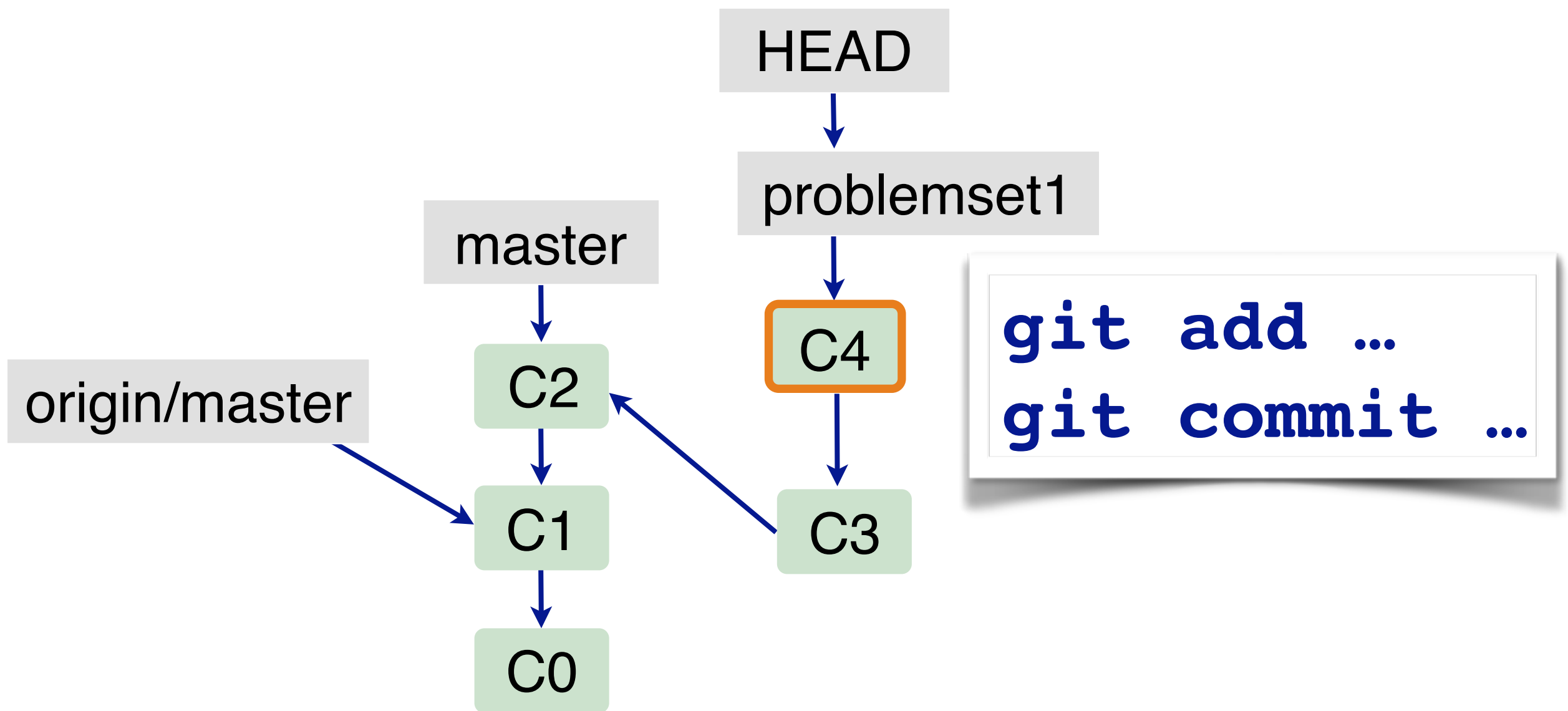
```
git branch problemset1
```



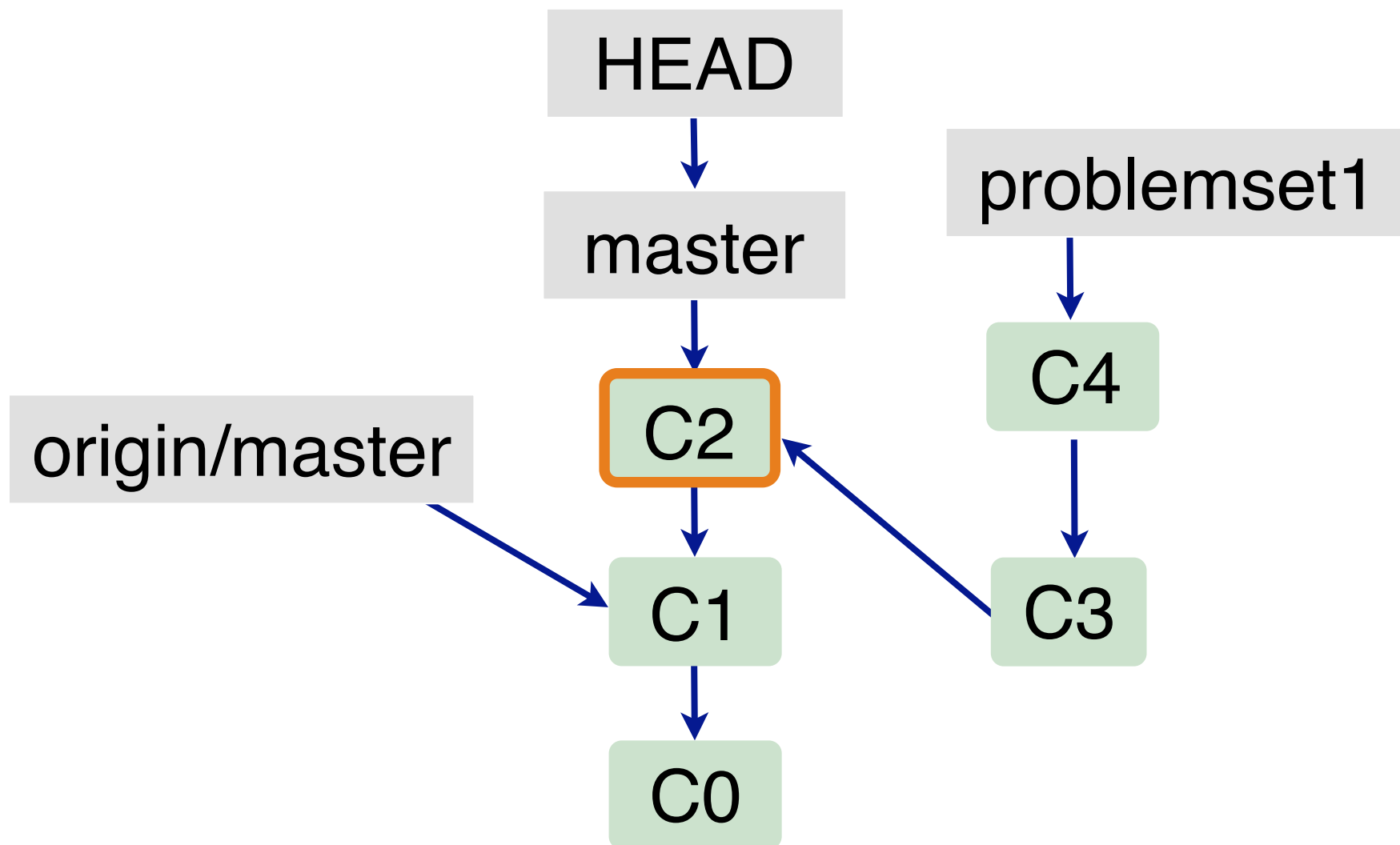
git checkout problemset1

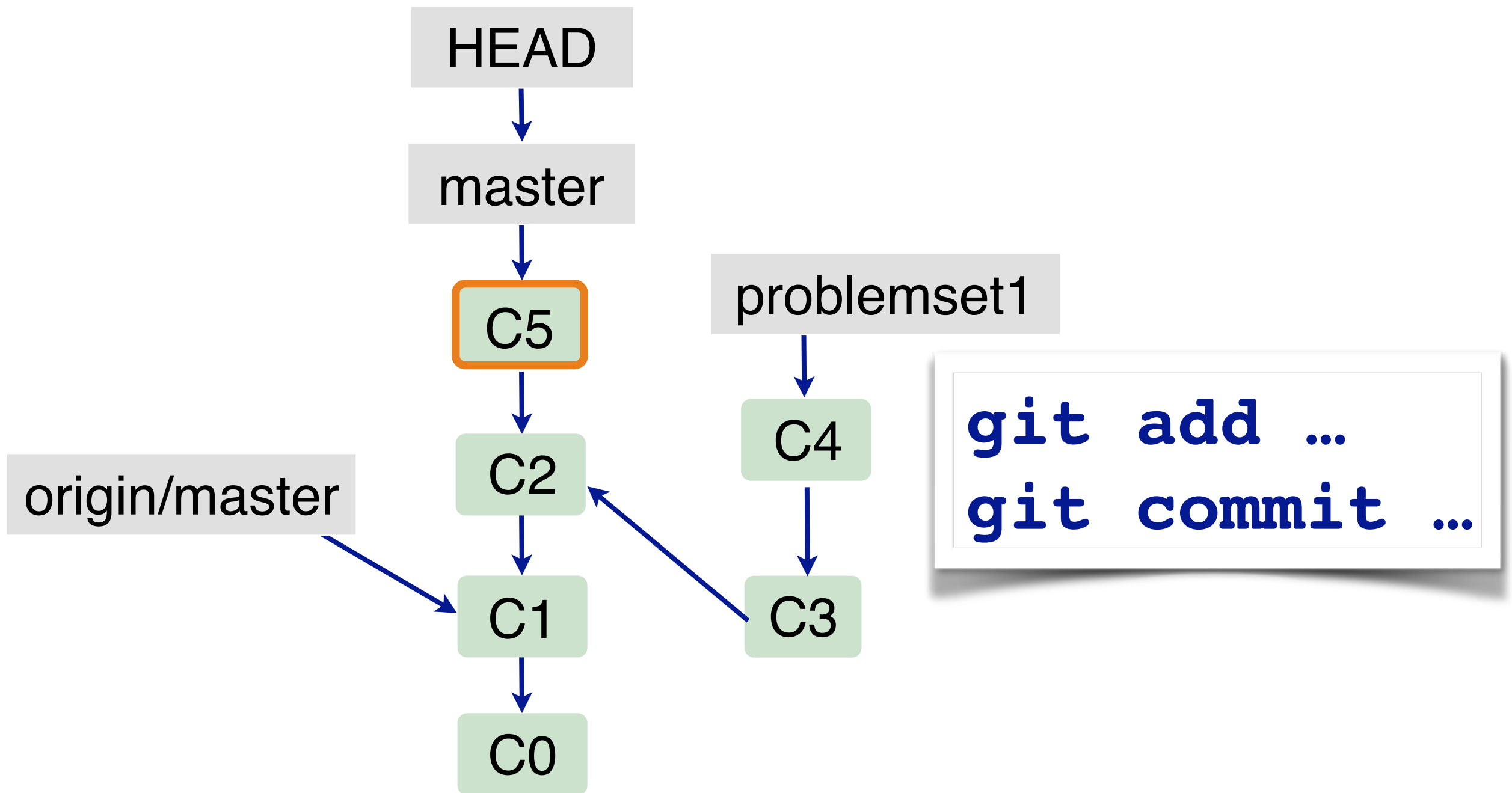


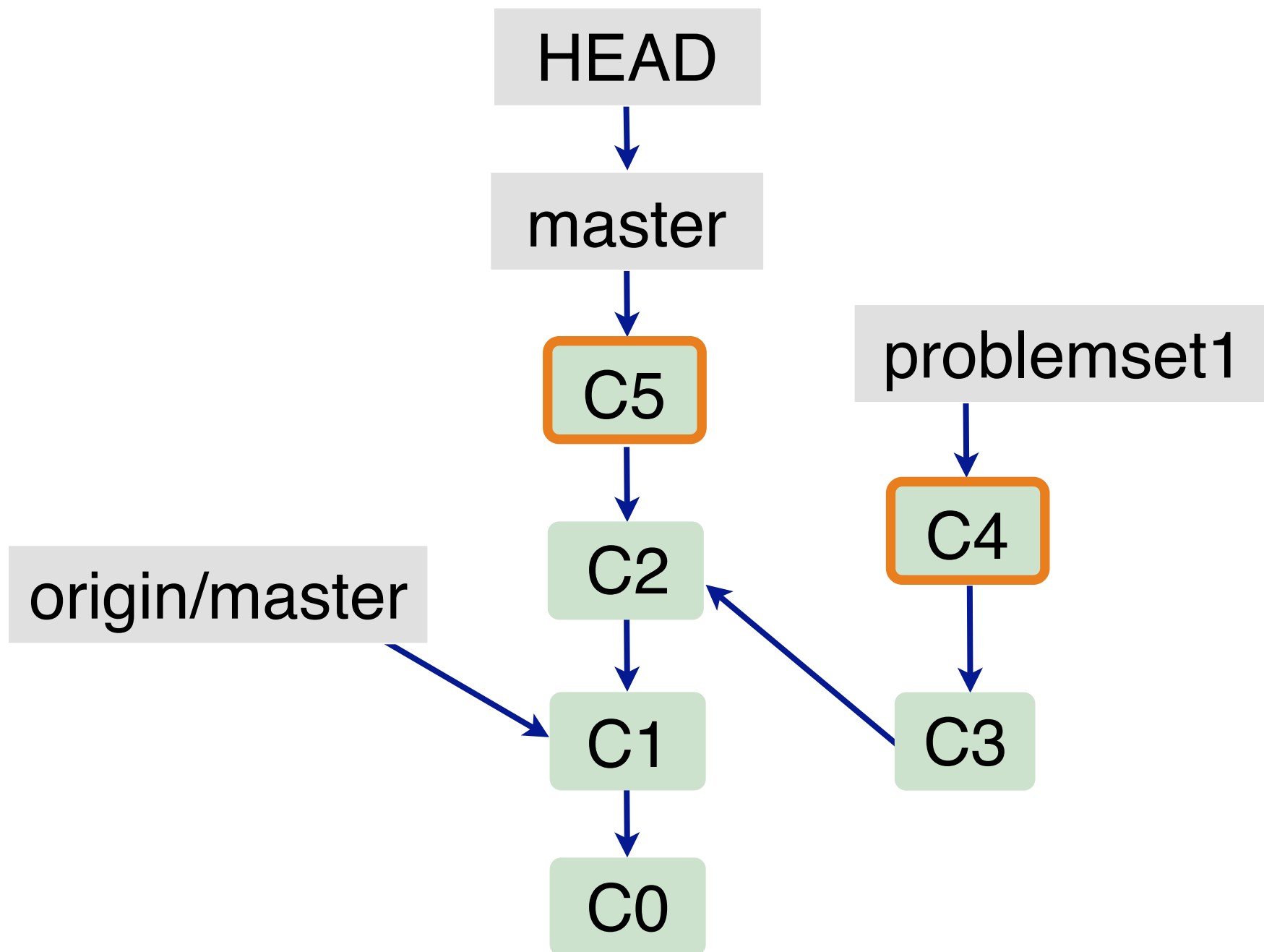




git checkout master







HEAD

master

git merge problemset1

C6

C5

C2

C1

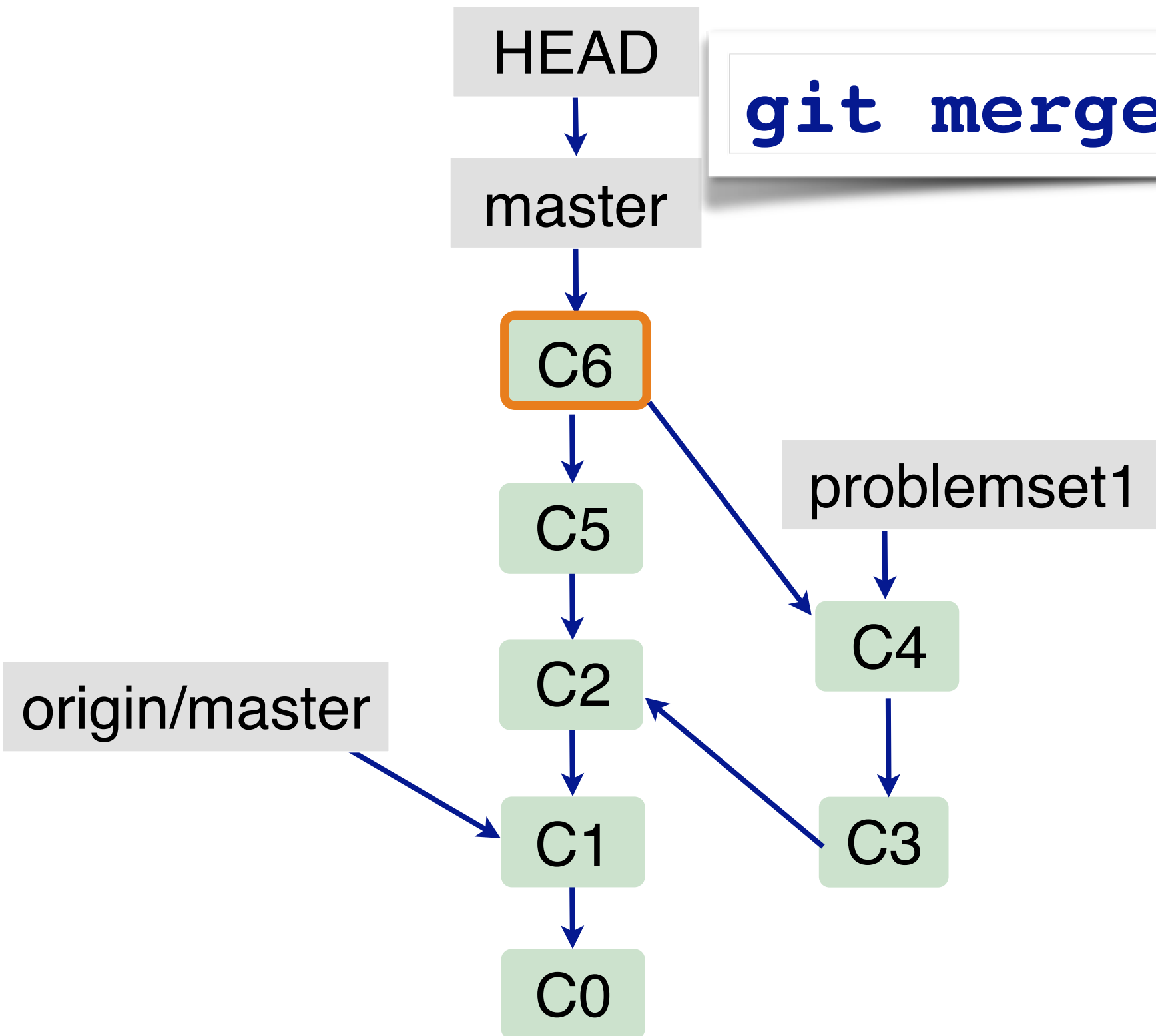
C0

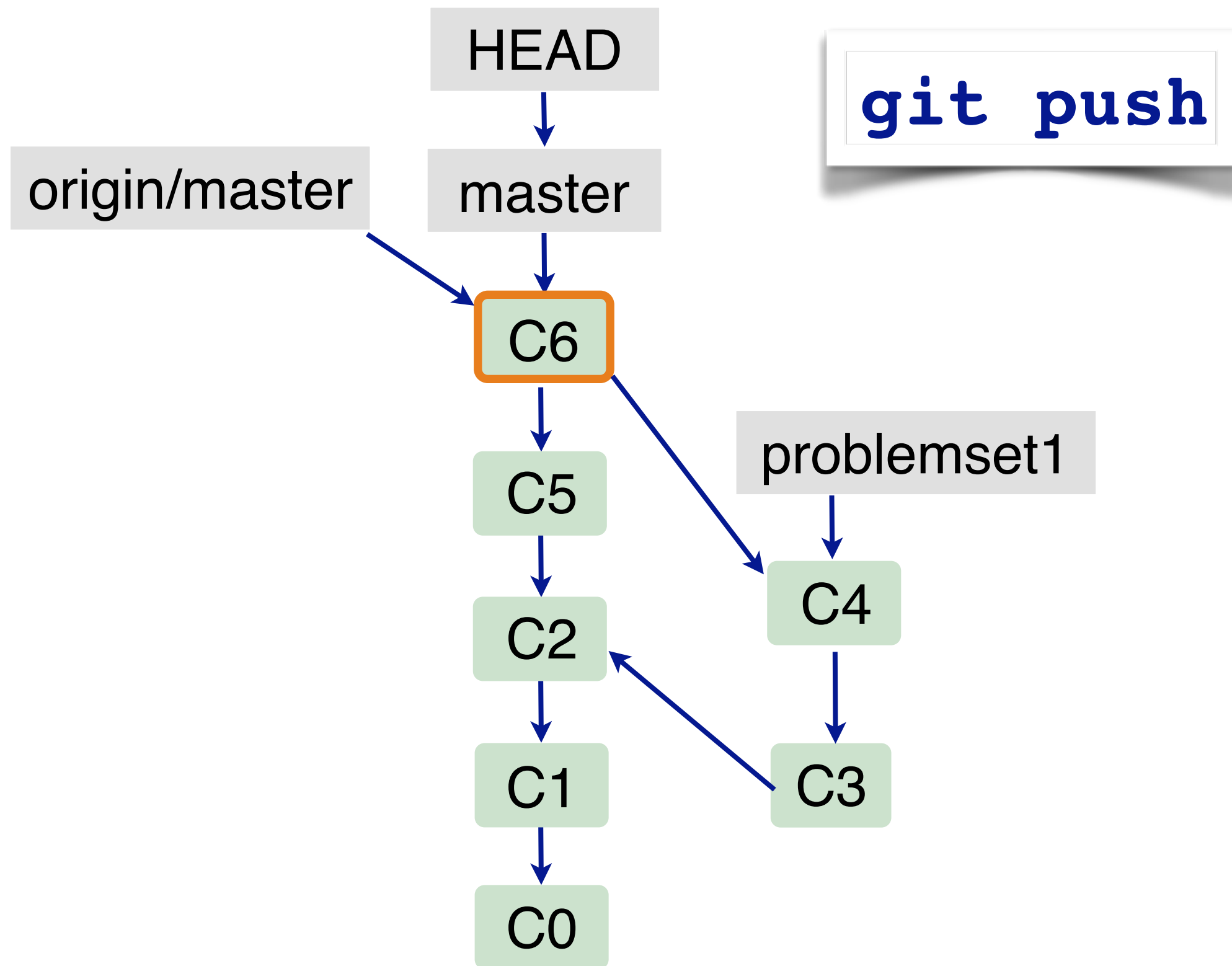
problemset1

C4

C3

origin/master





More to git

More to git ...

- > Merging and mergetool
- > Squashing commits when merging
- > Resolving conflicts
- > User authentication with ssh
- > gitx and other graphical tools
- > git configure — remembering your name
- > git remote — multiple remote repos
- > github — an open source public repo
- > ...

Resources



<http://git-scm.com/>



<http://book.git-scm.com/index.html>



<https://github.com/>

Getting Git
Scott Chacon

<http://www.slideshare.net/chacon/getting-git>



<http://oreilly.com/>



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