



**<https://github.com/magnusstahre/slides>**

**<https://goo.gl/BYCED1>**

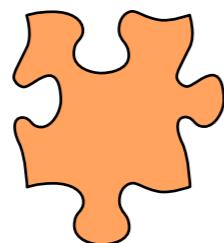
# **git gone wild**

## **CodeMash 2018**

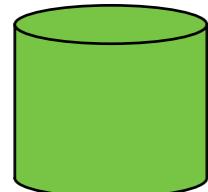
**Magnus Stahre**  
**@magnusstahre**



# Object types



blob



tree

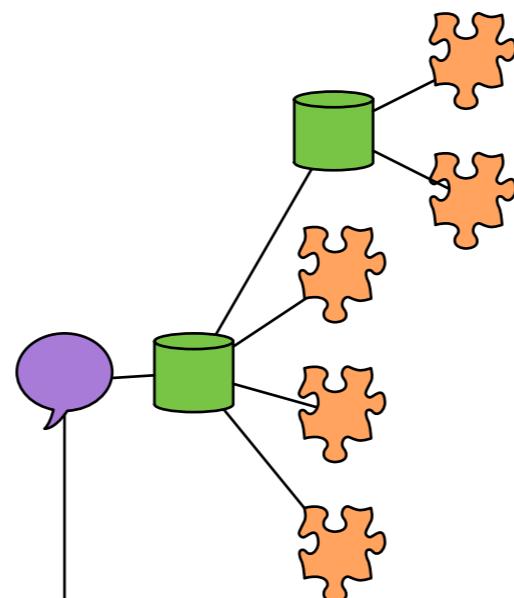


commit

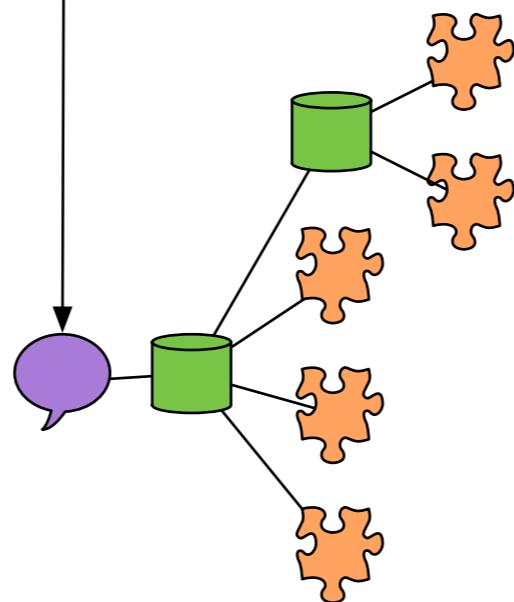
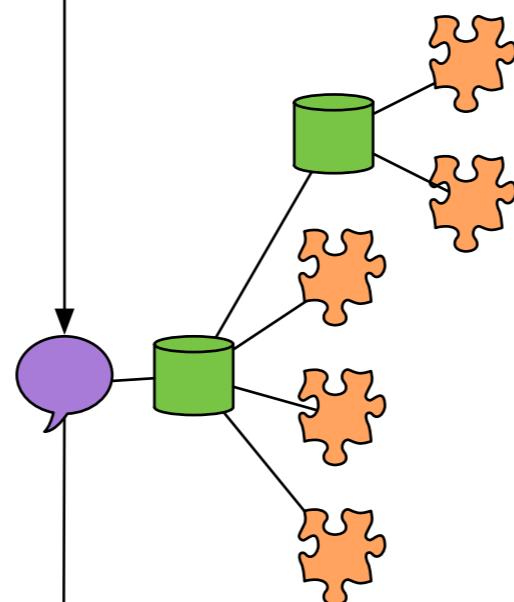


ref (branch)

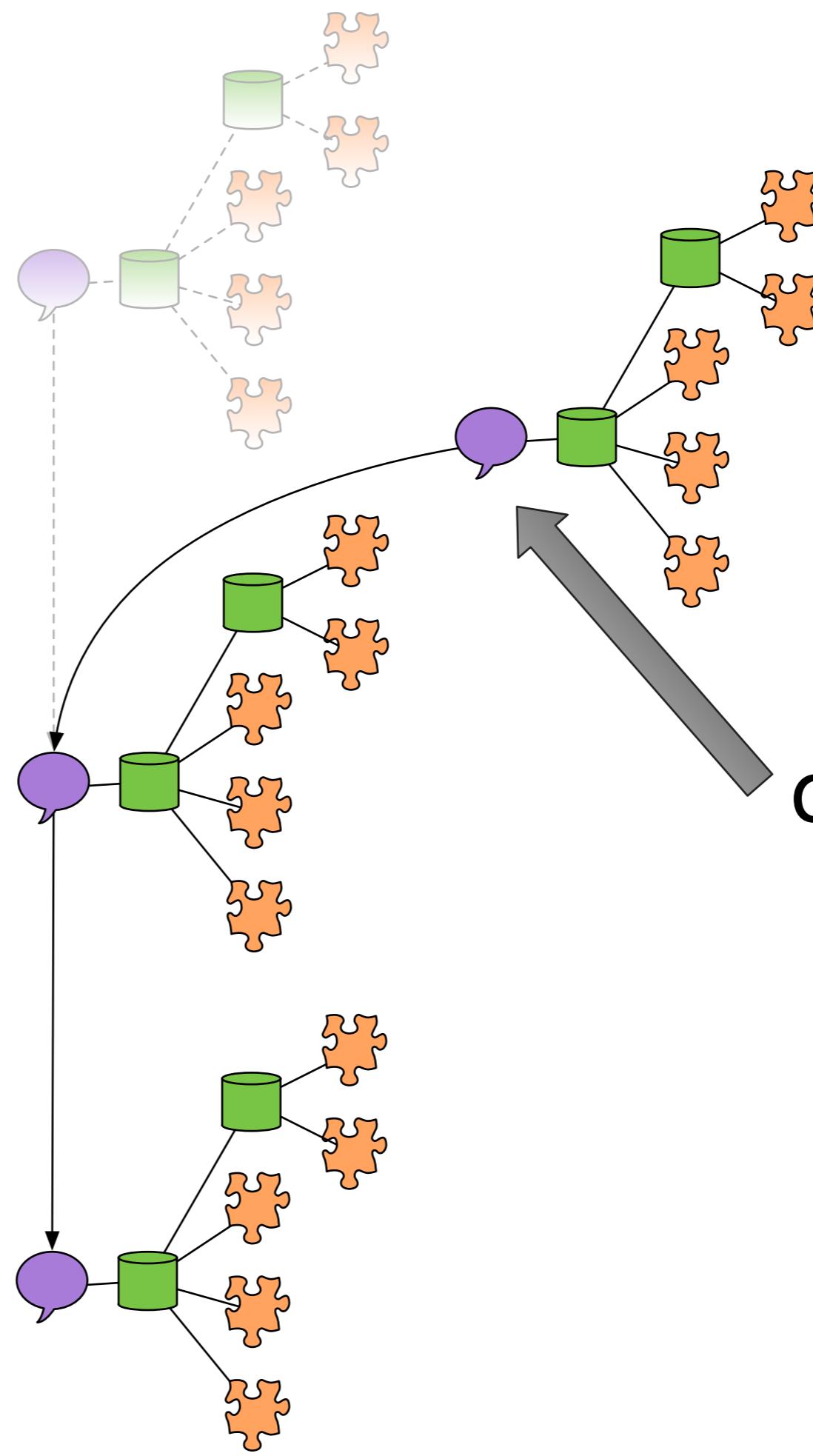
develop



master



master

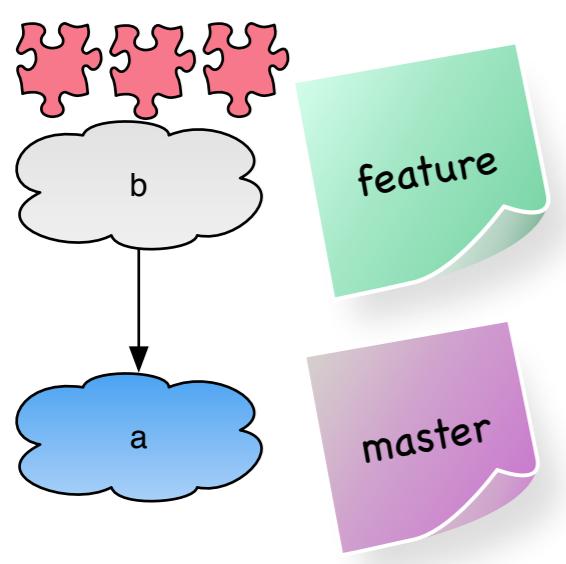


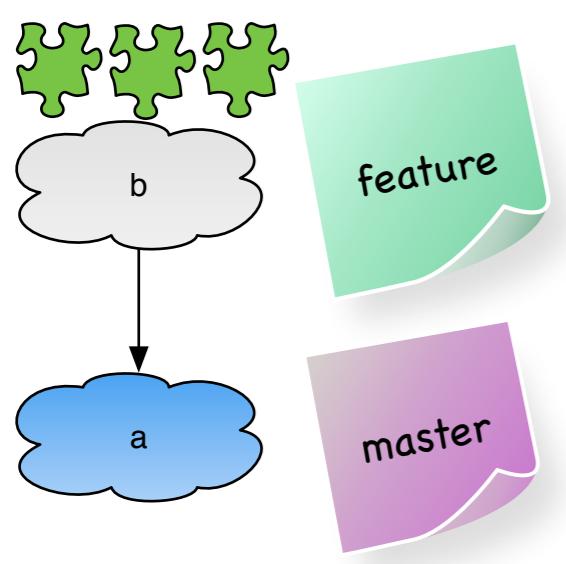
develop

**The .git folder:  
Here be dragons.**

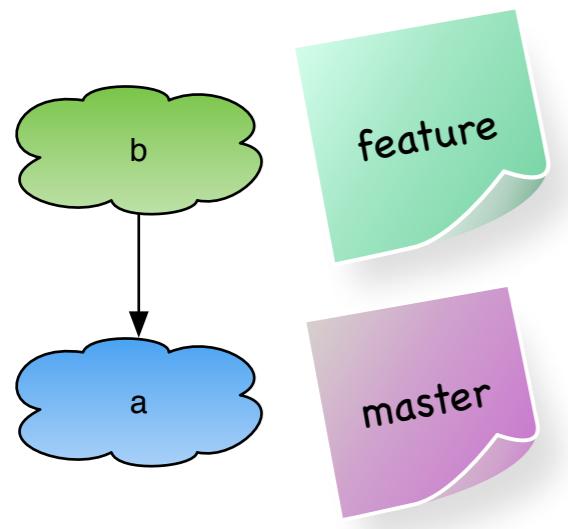


**Scenario:  
Add missing files**



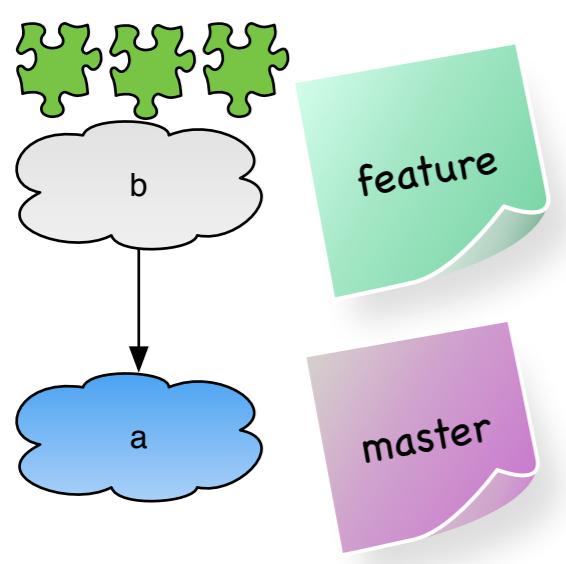


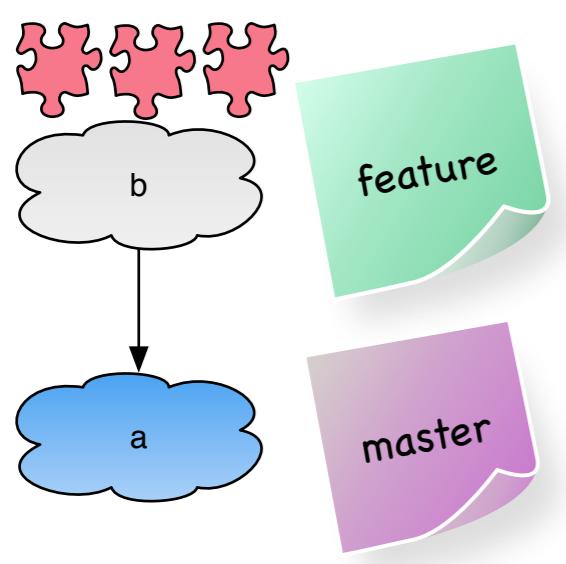
```
$ git add ...
```



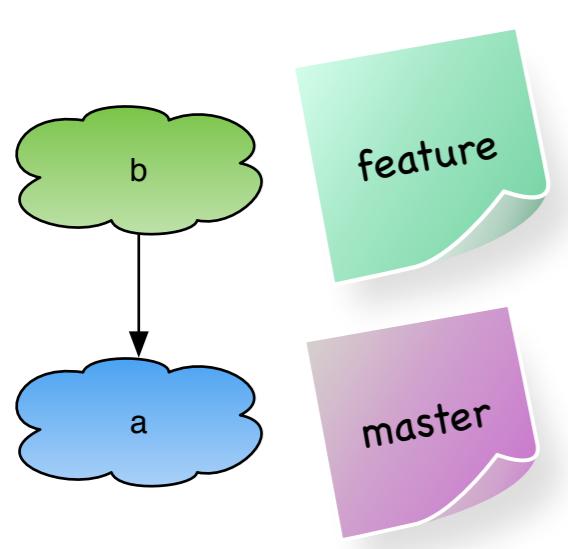
```
$ git add ...  
$ git commit --amend
```

**Scenario:**  
**Remove files added by mistake**





```
$ git rm --cached ...
```



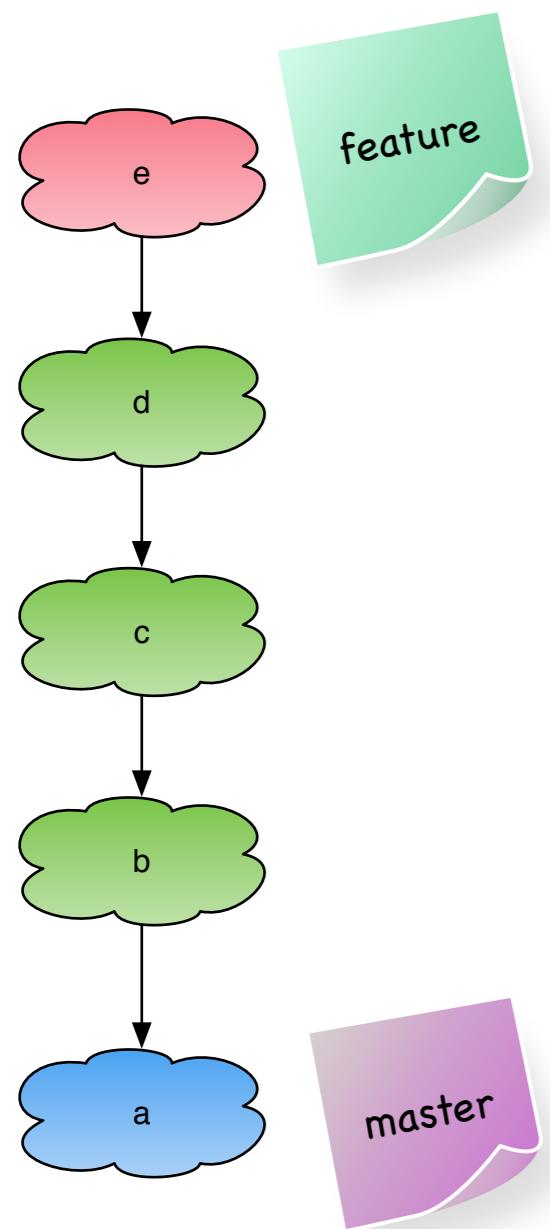
```
$ git rm --cached ...
$ git commit --amend
```

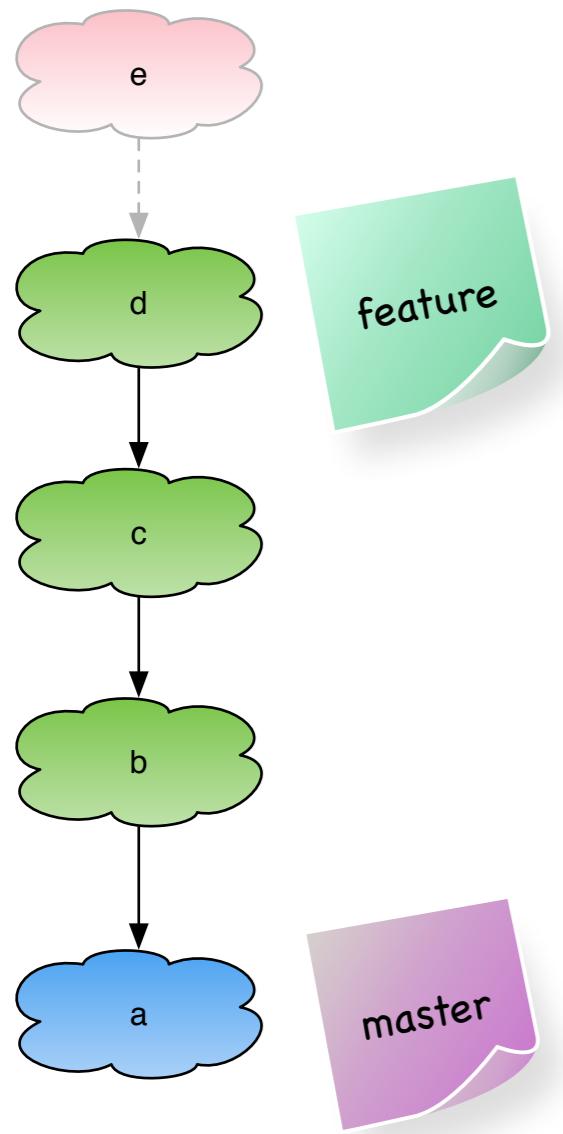
**Scenario:  
Avoid adding passwords**

```
$ echo 'passwordfile' >> .gitignore
```

```
$ echo 'passwordfile' >> .gitignore  
$ git update-index --assume-unchanged 'configfile'
```

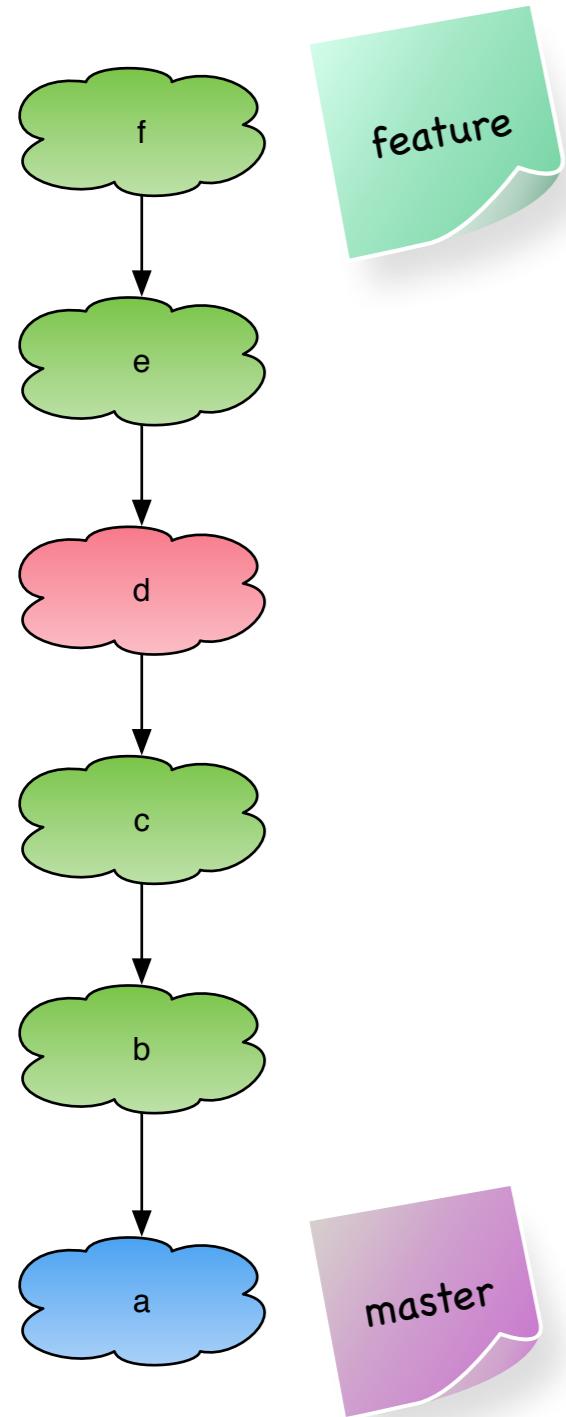
**Scenario:**  
**Delete top commit**

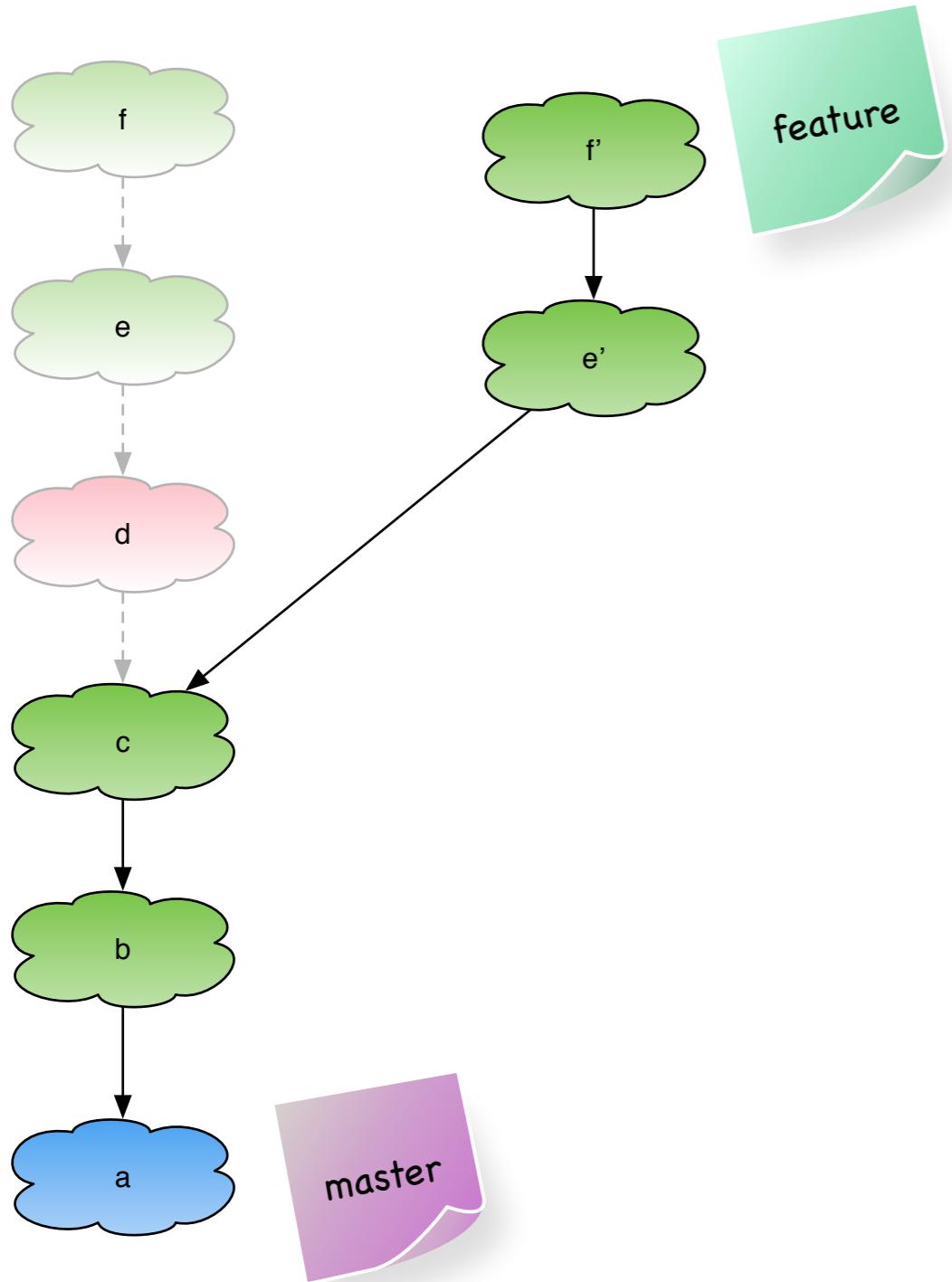




```
$ git reset --hard HEAD~
```

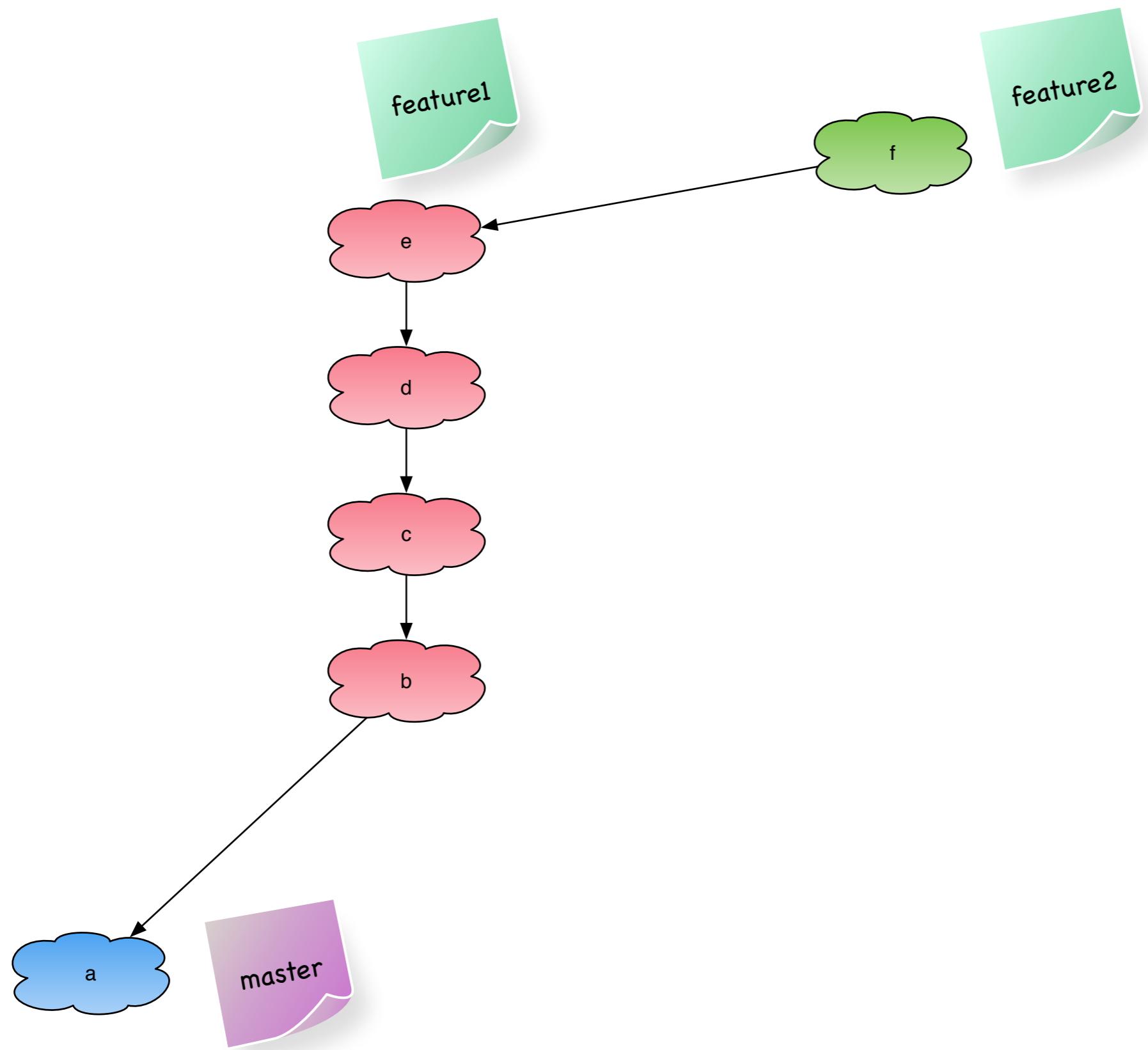
**Scenario:**  
**Delete previous commit**

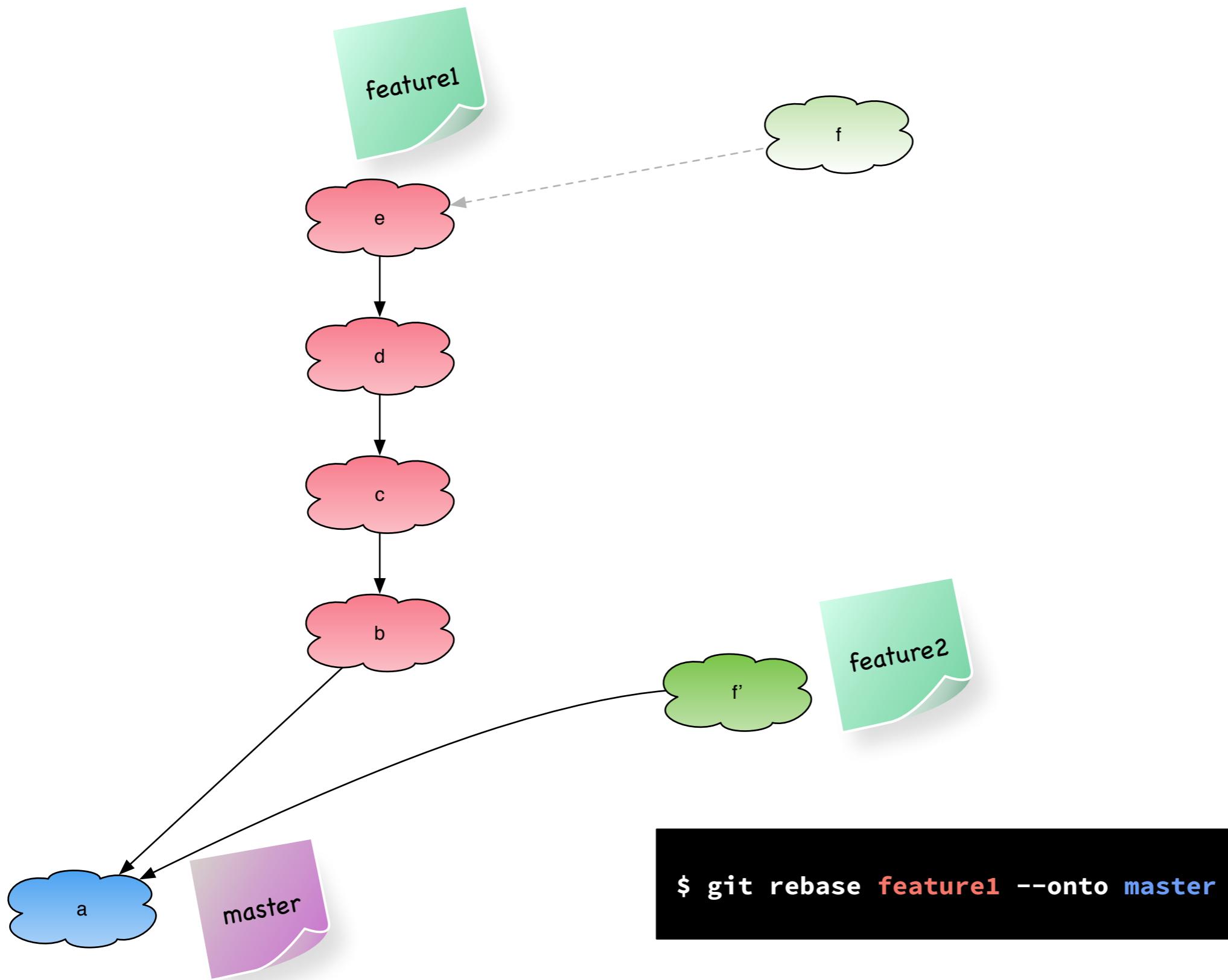




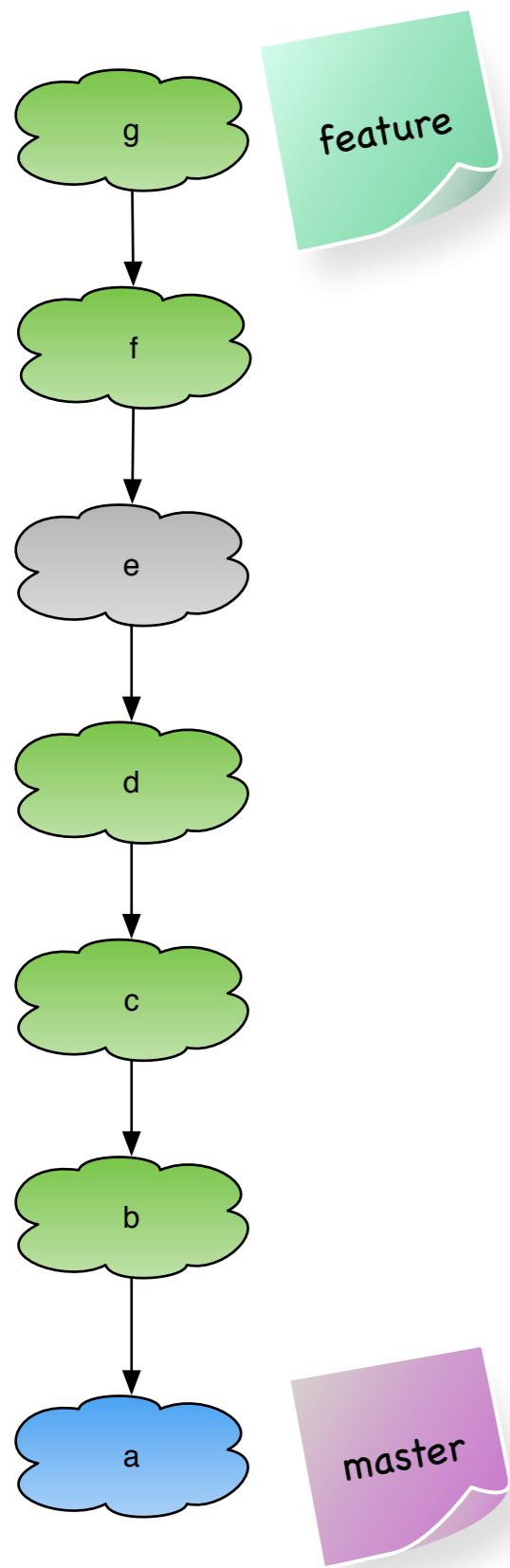
```
$ git rebase d --onto d~
```

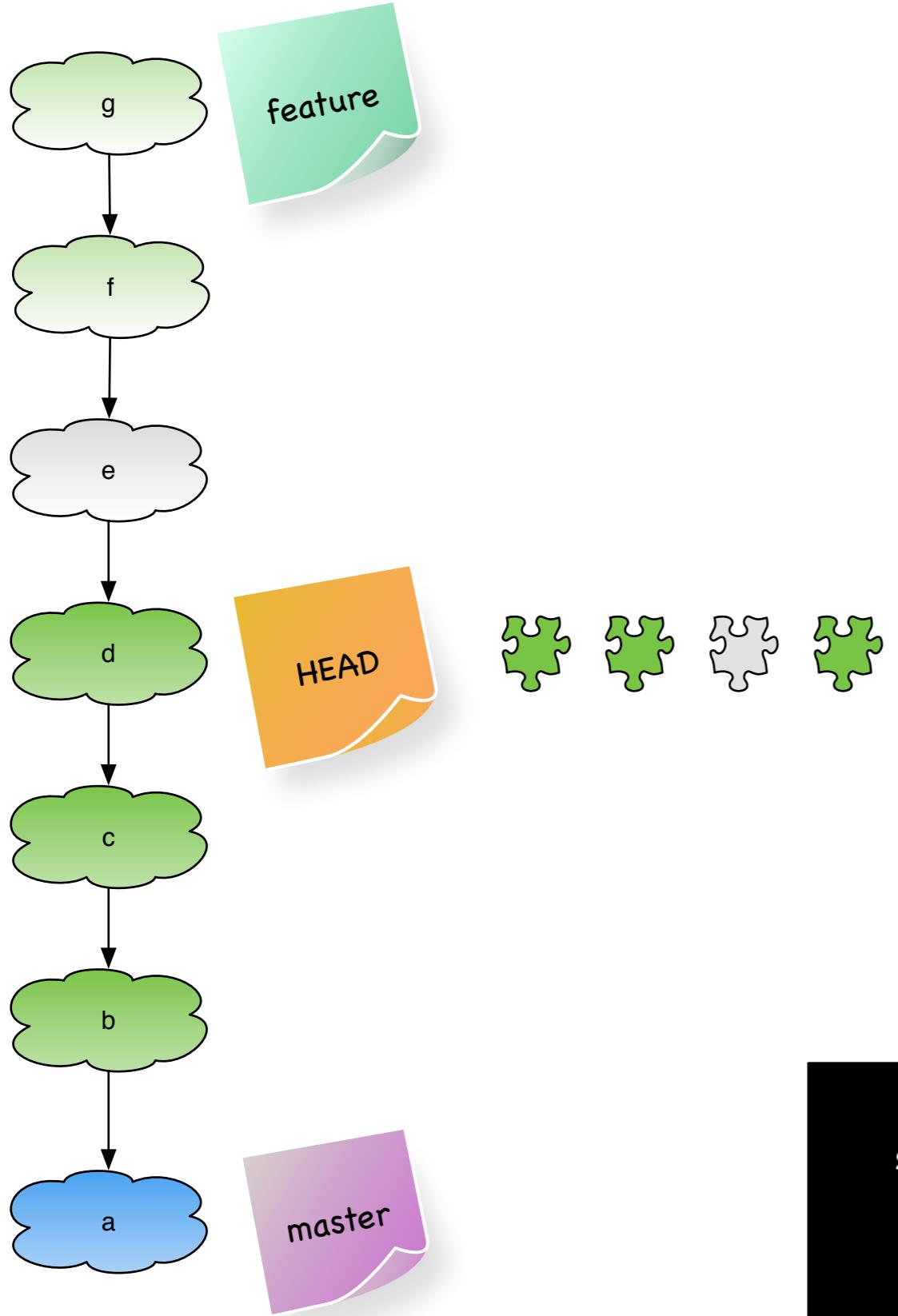
**Scenario:**  
**Fix wrong base for feature**



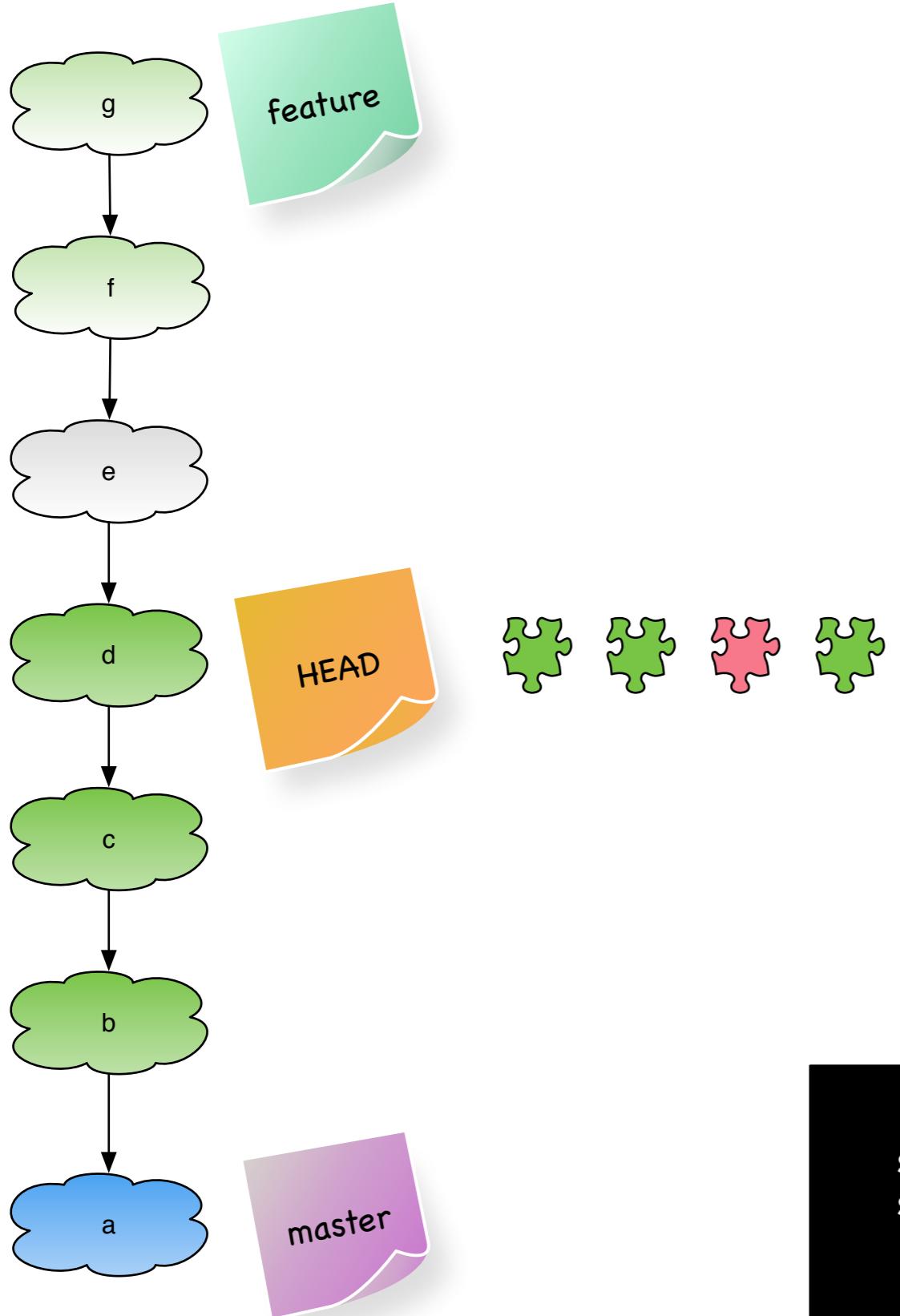


**Scenario:  
Amend a previous commit**

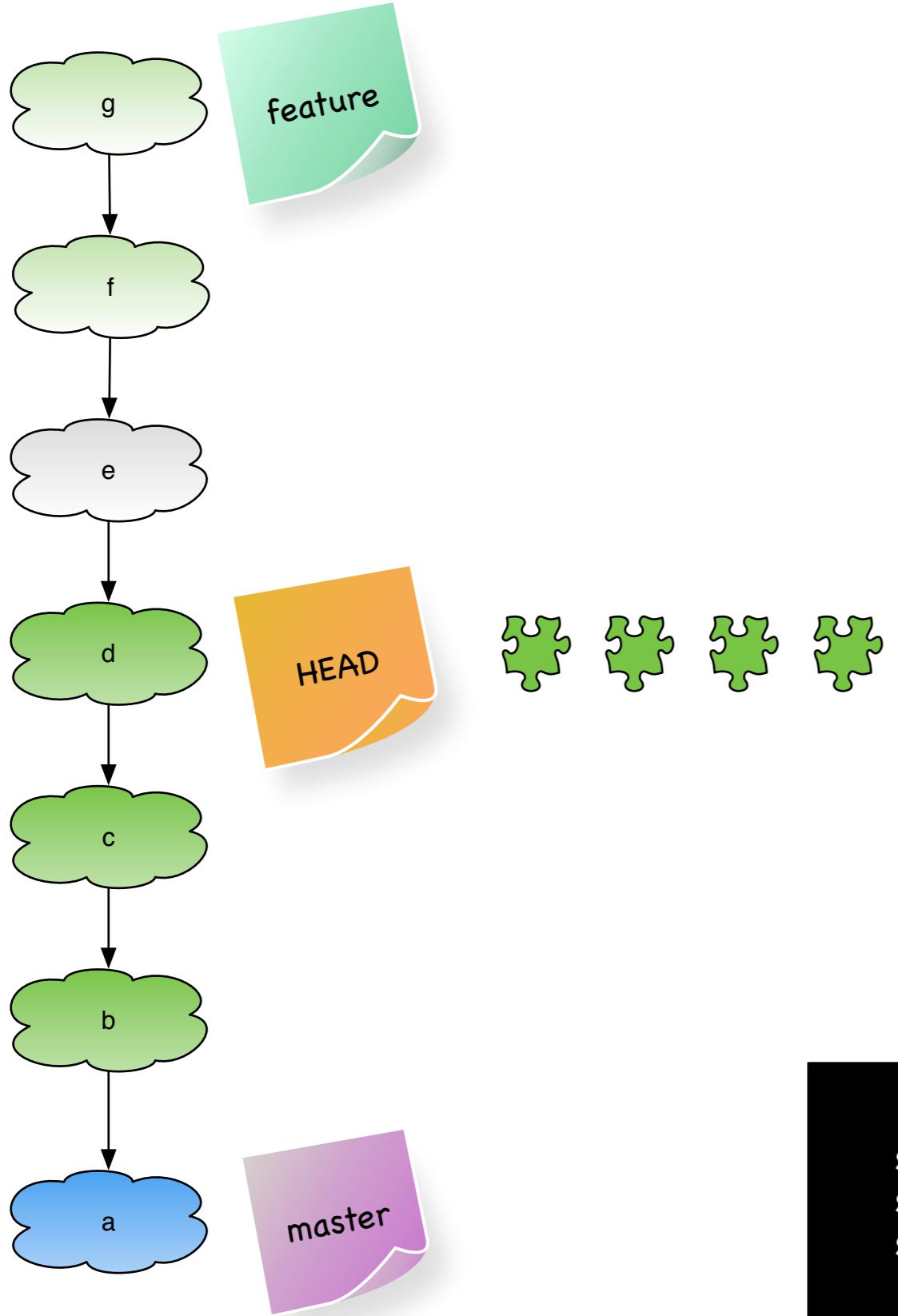




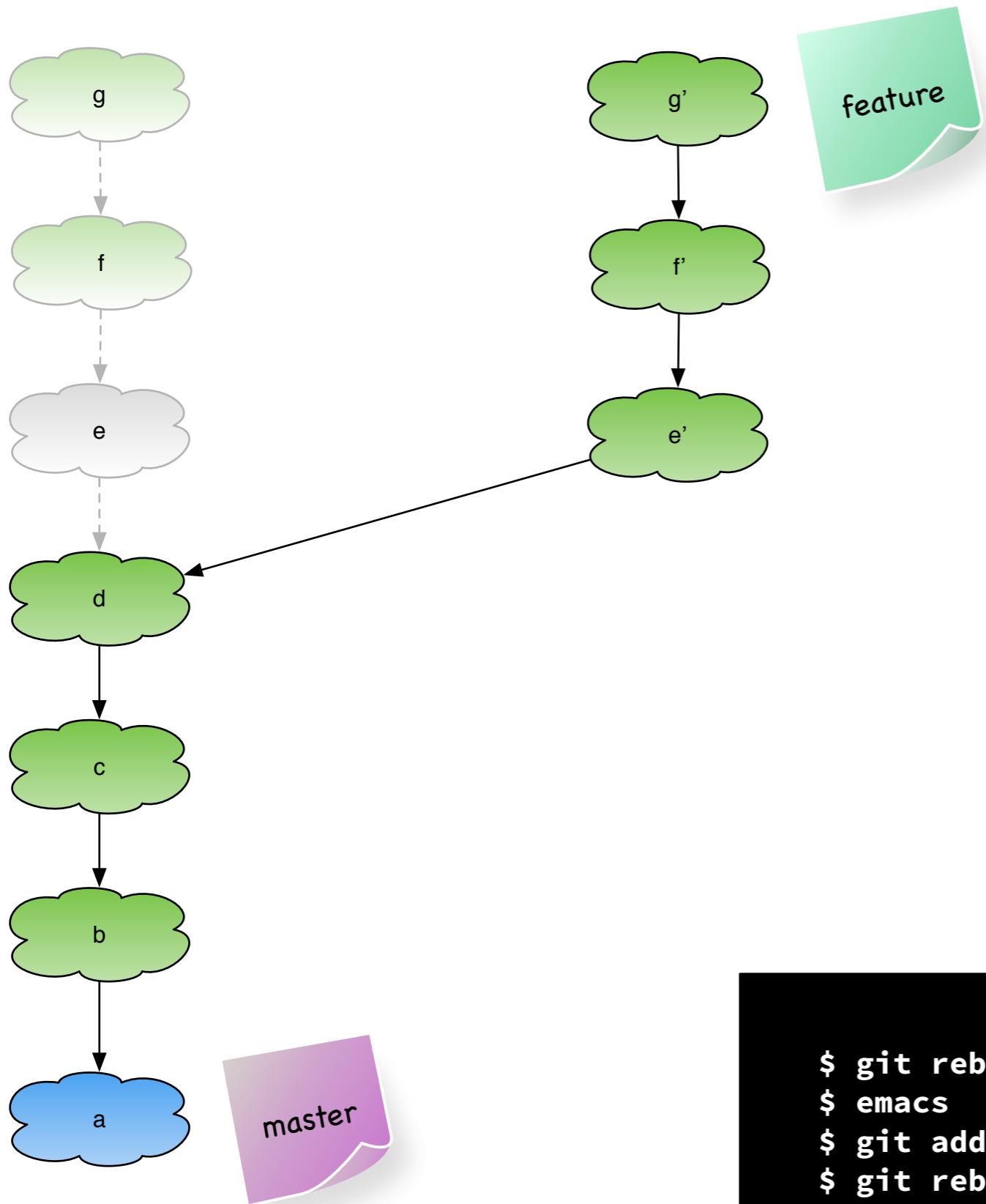
```
$ git rebase -i e~
```



```
$ git rebase -i e~  
$ emacs
```



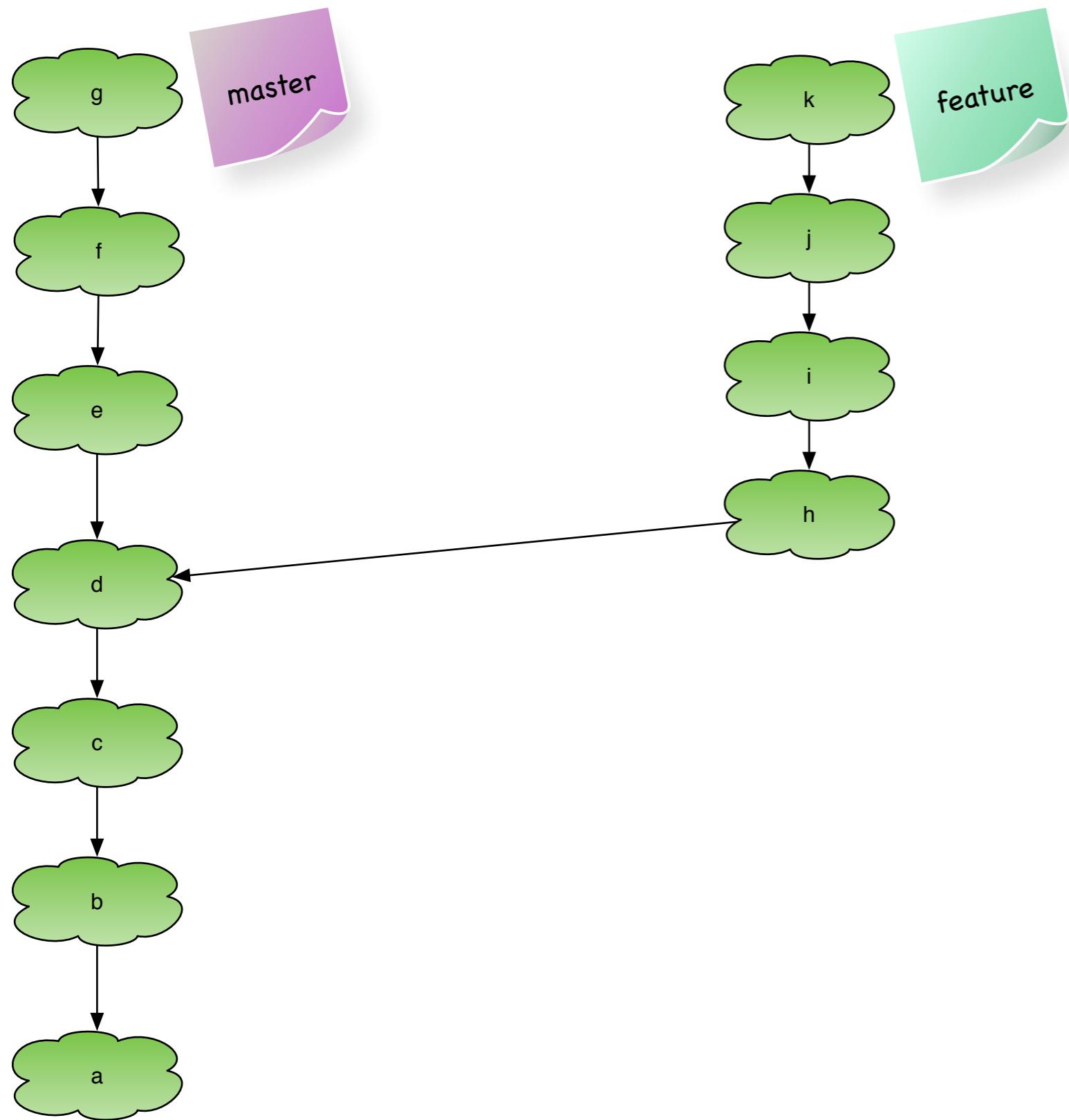
```
$ git rebase -i e~  
$ emacs  
$ git add ...
```

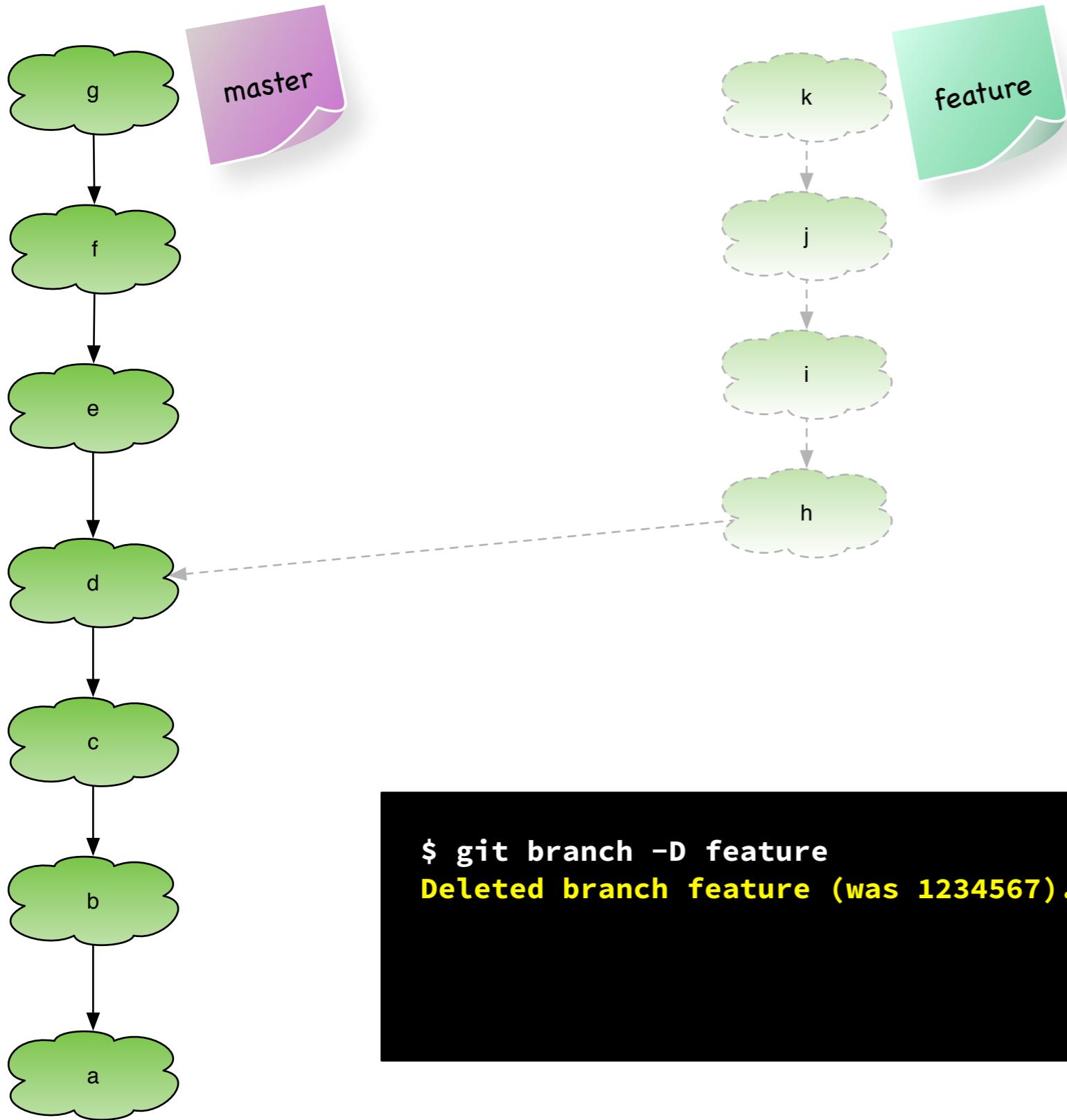


```
$ git rebase -i e~  
$ emacs  
$ git add ...  
$ git rebase --continue
```

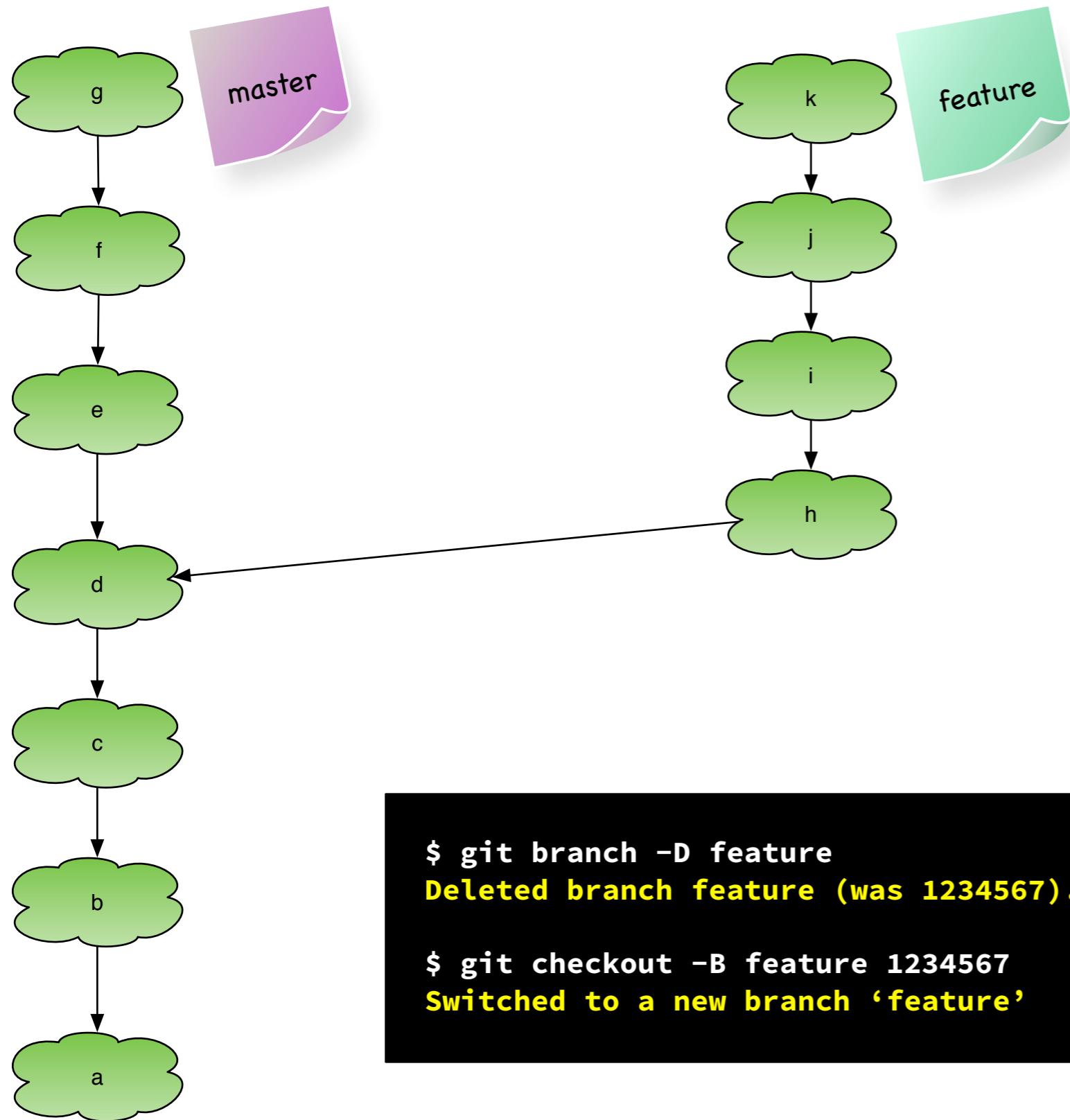
# **Scenario:**

## **Finding lost work**

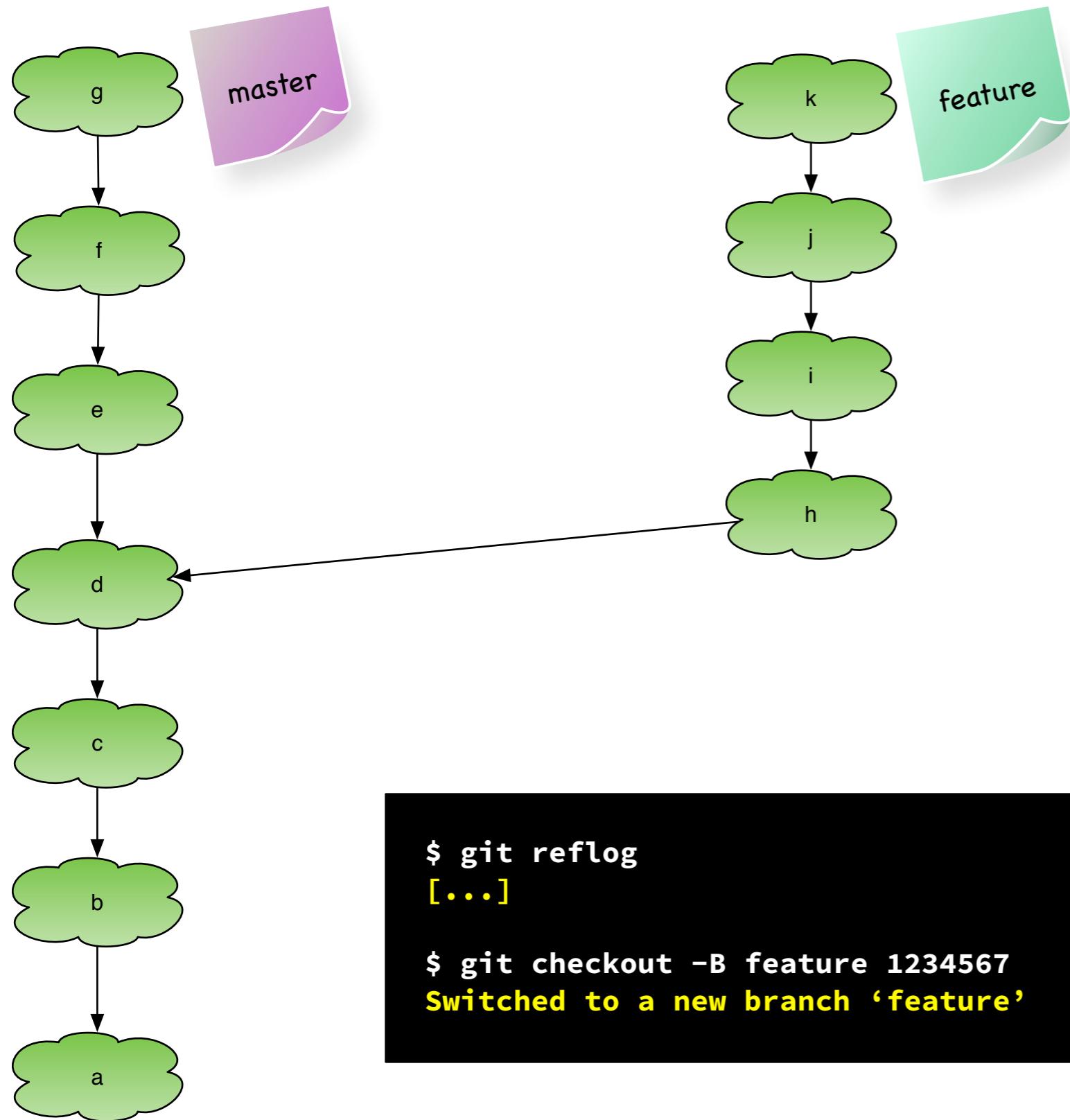




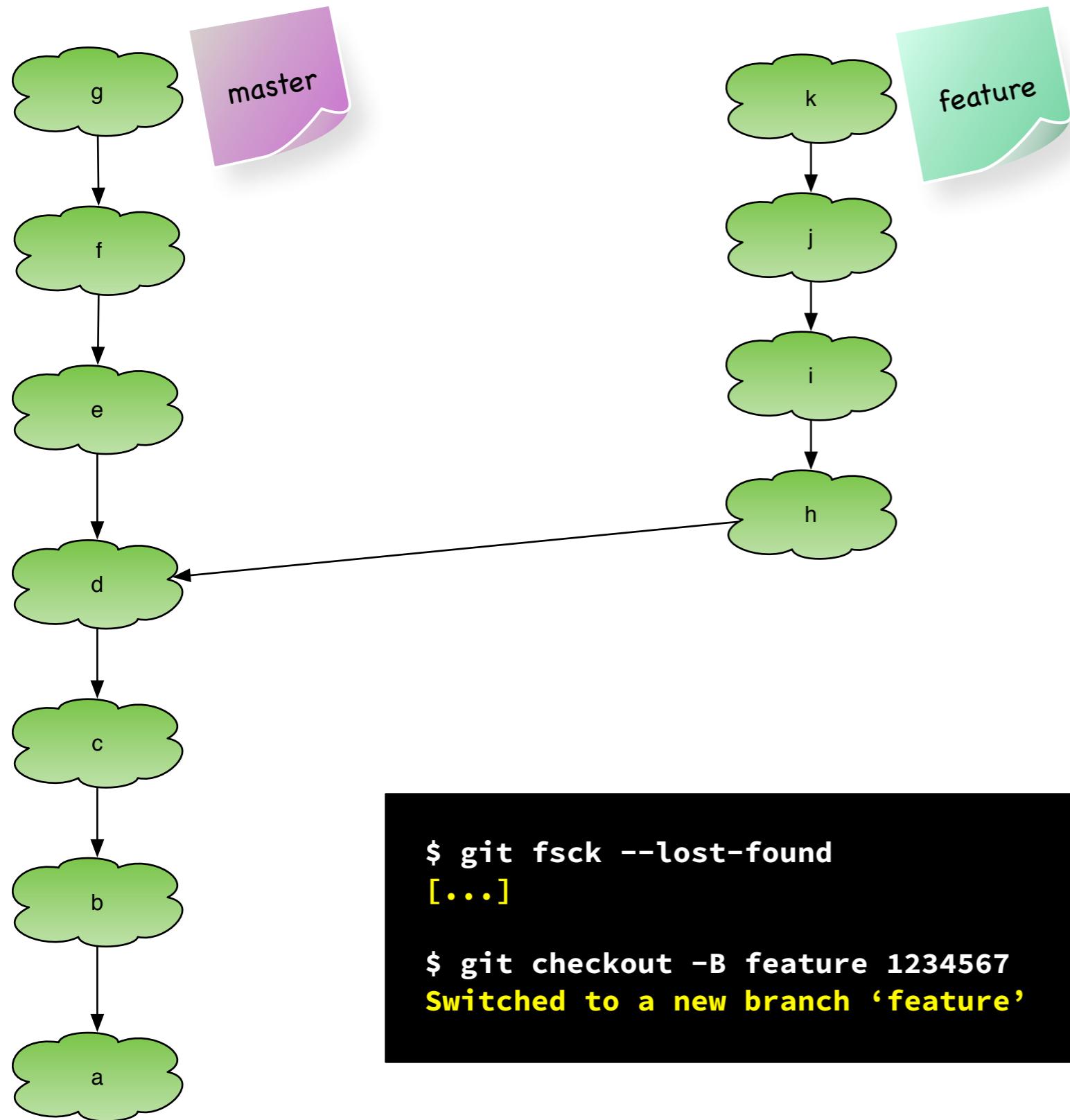
```
$ git branch -D feature  
Deleted branch feature (was 1234567).
```



```
$ git branch -D feature  
Deleted branch feature (was 1234567).  
  
$ git checkout -B feature 1234567  
Switched to a new branch 'feature'
```



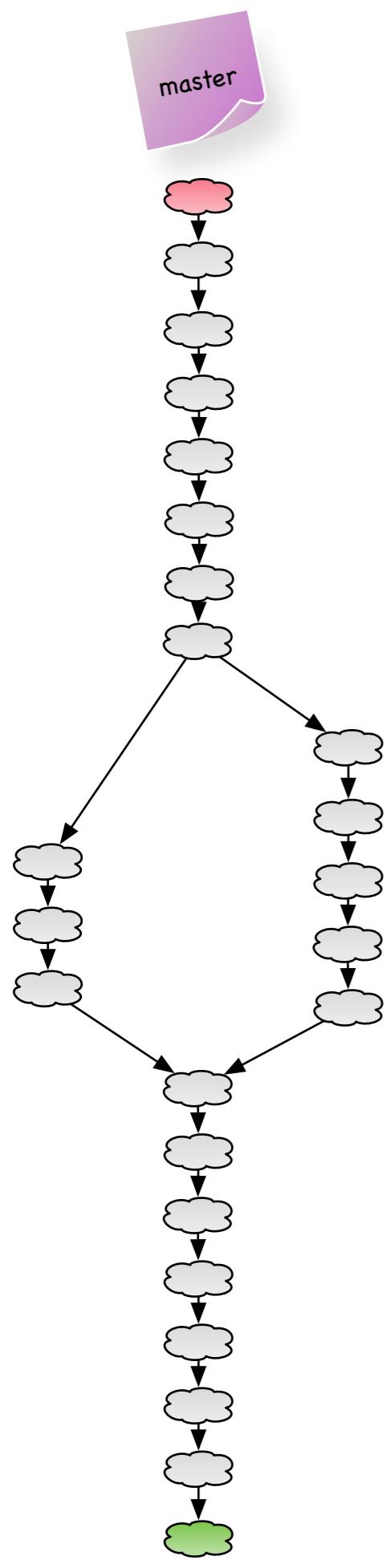
```
$ git reflog  
[...]  
  
$ git checkout -B feature 1234567  
Switched to a new branch 'feature'
```

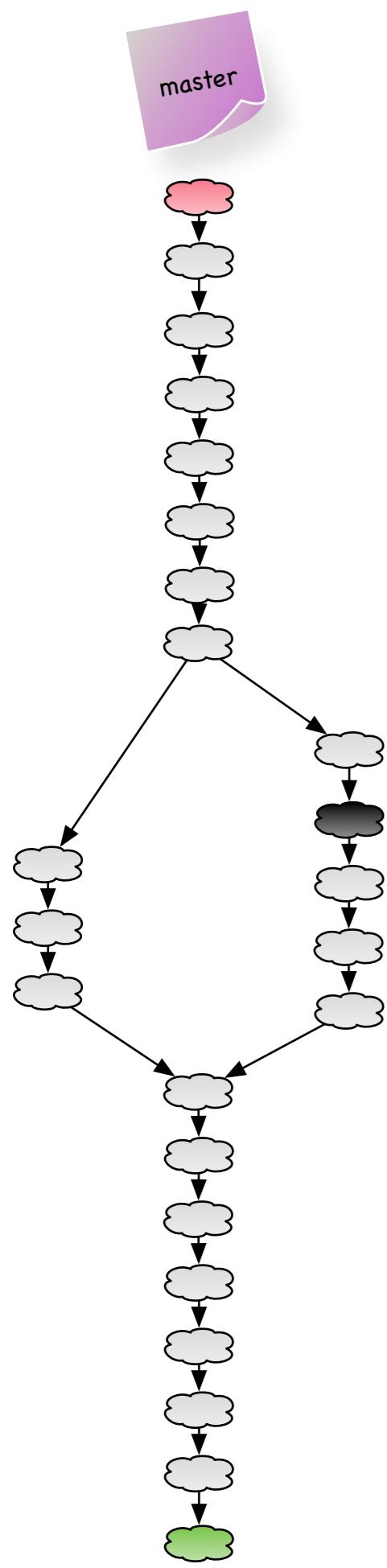


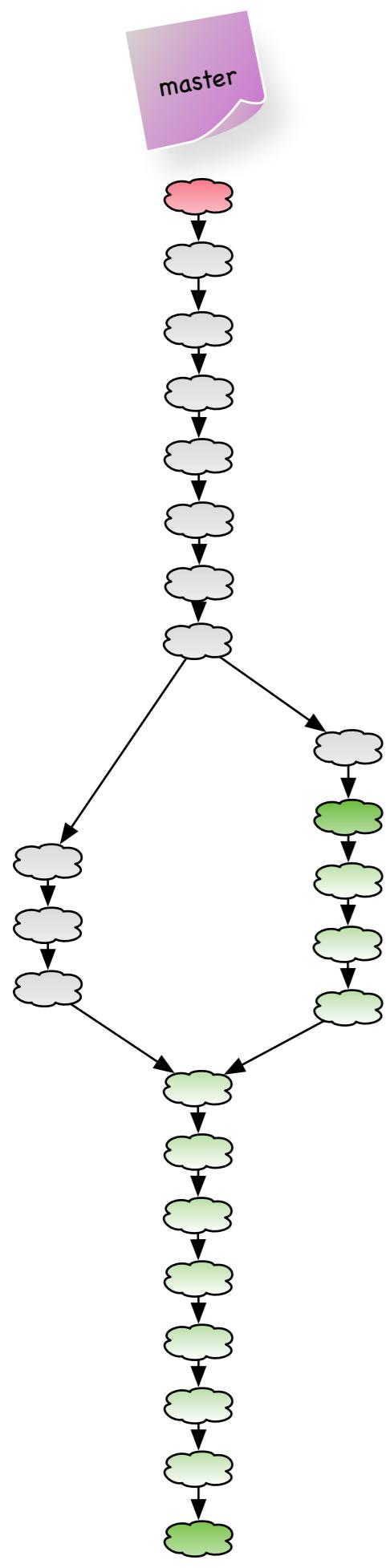
```
$ git fsck --lost-found  
[...]  
  
$ git checkout -B feature 1234567  
Switched to a new branch 'feature'
```

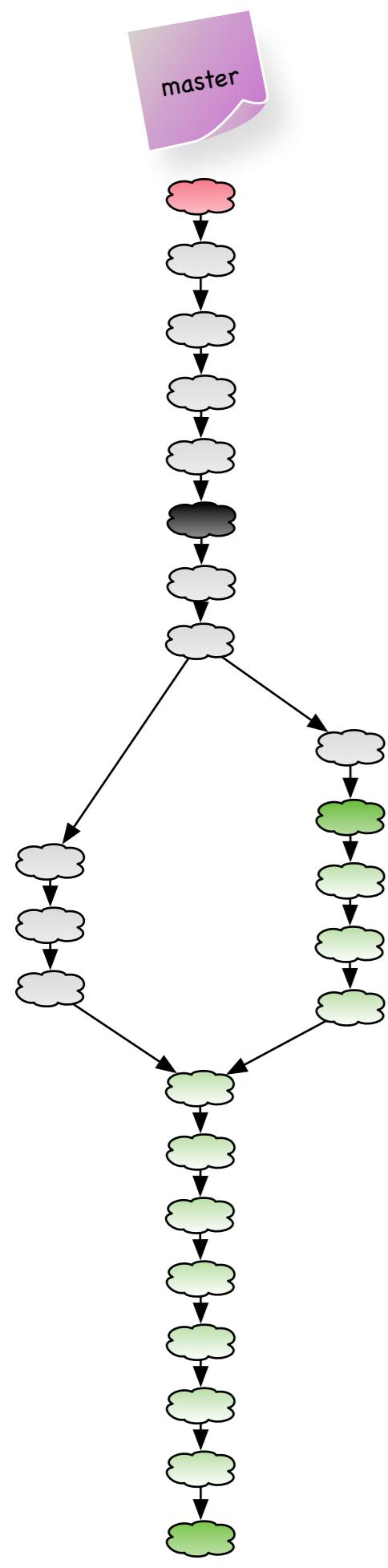
# **Scenario:**

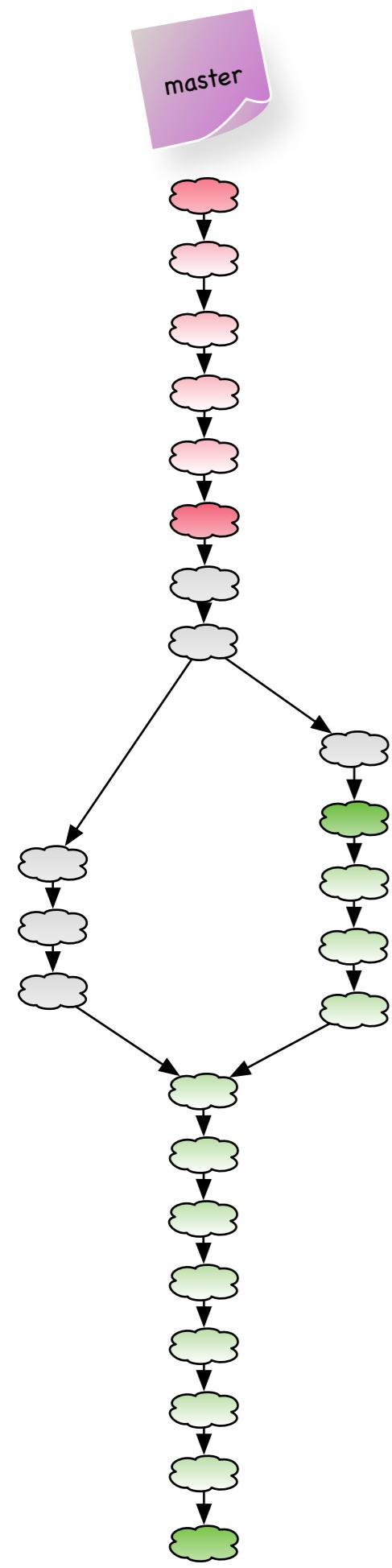
## **Finding bug**

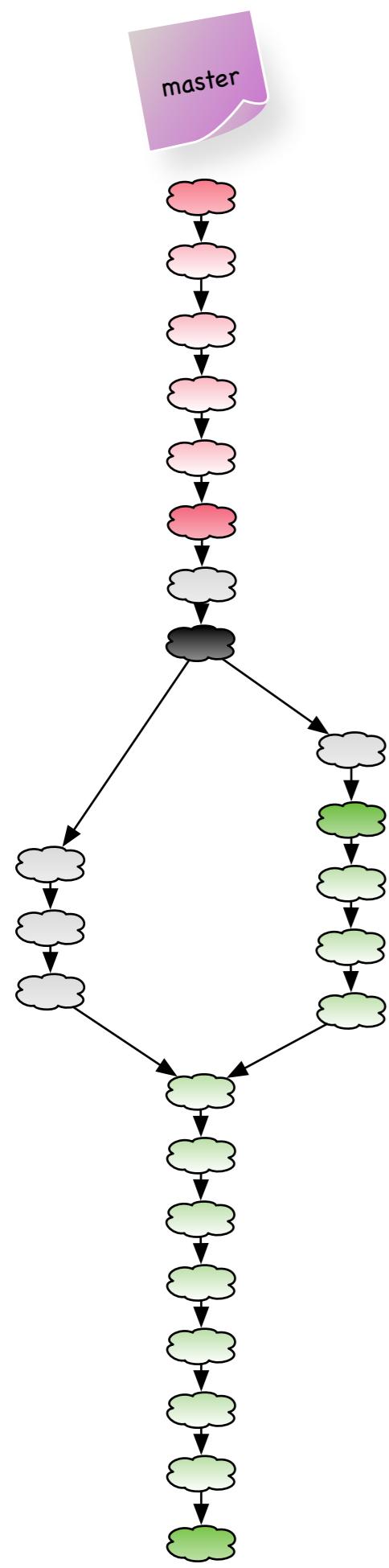


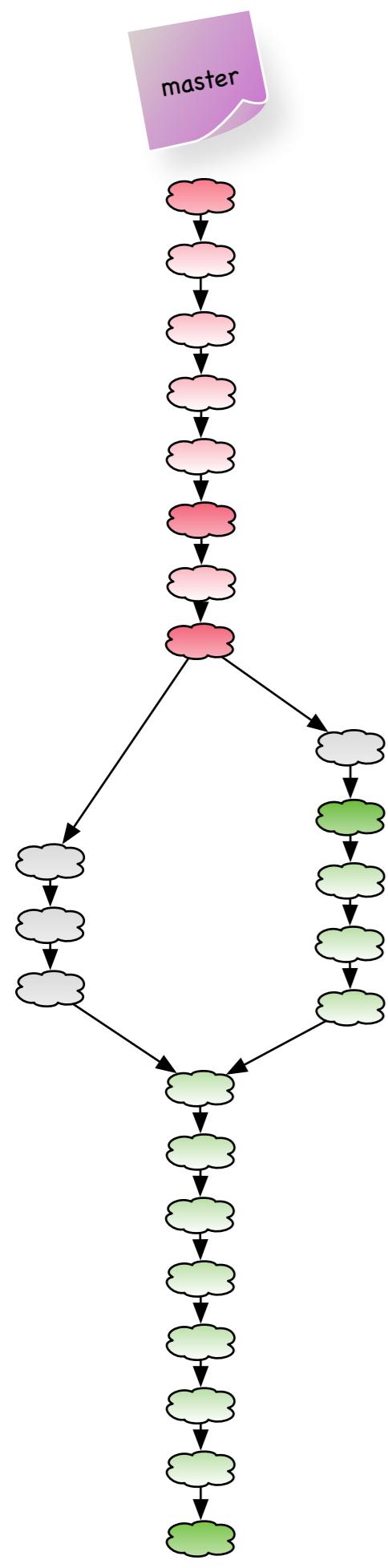


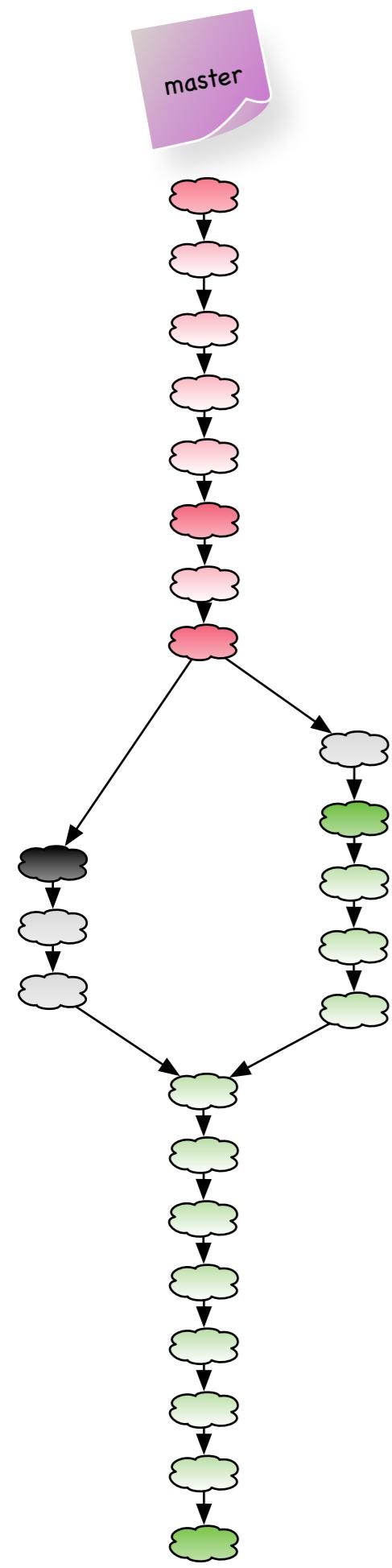


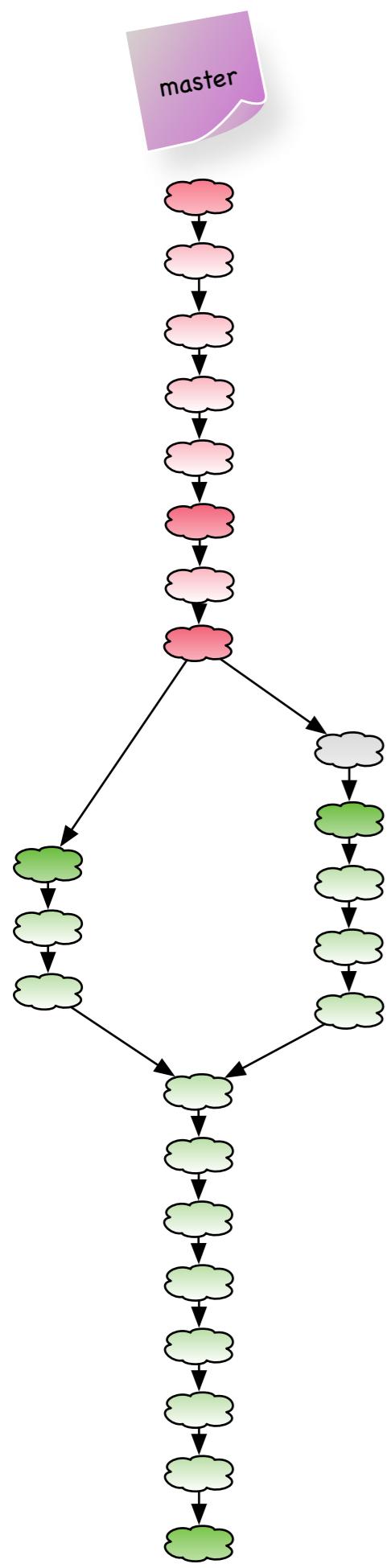


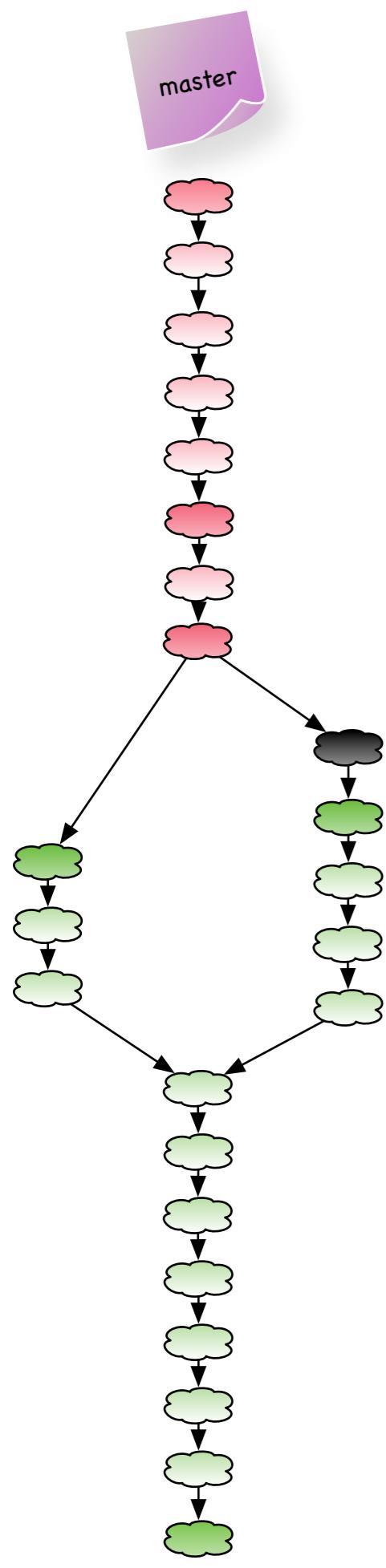


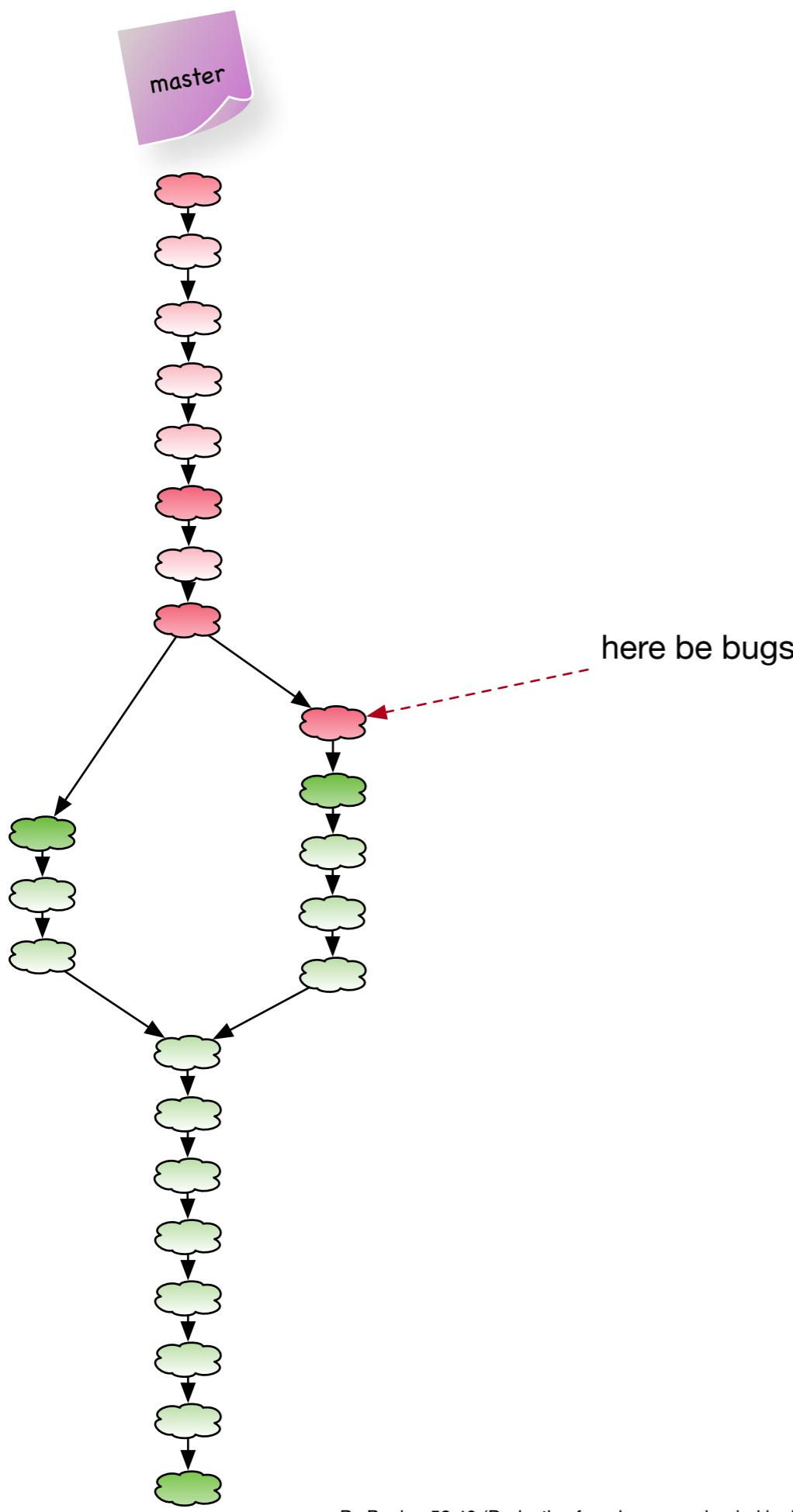








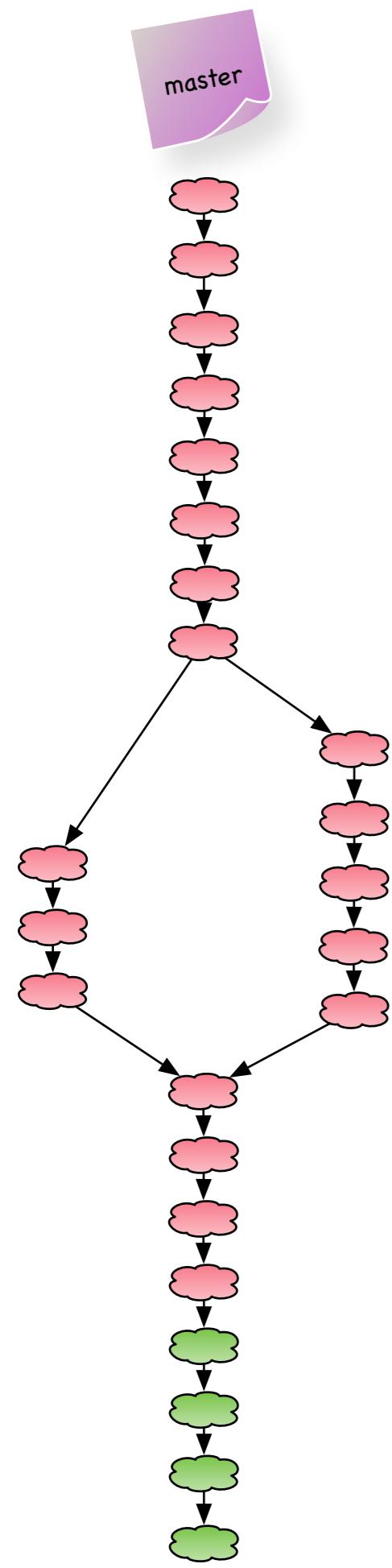


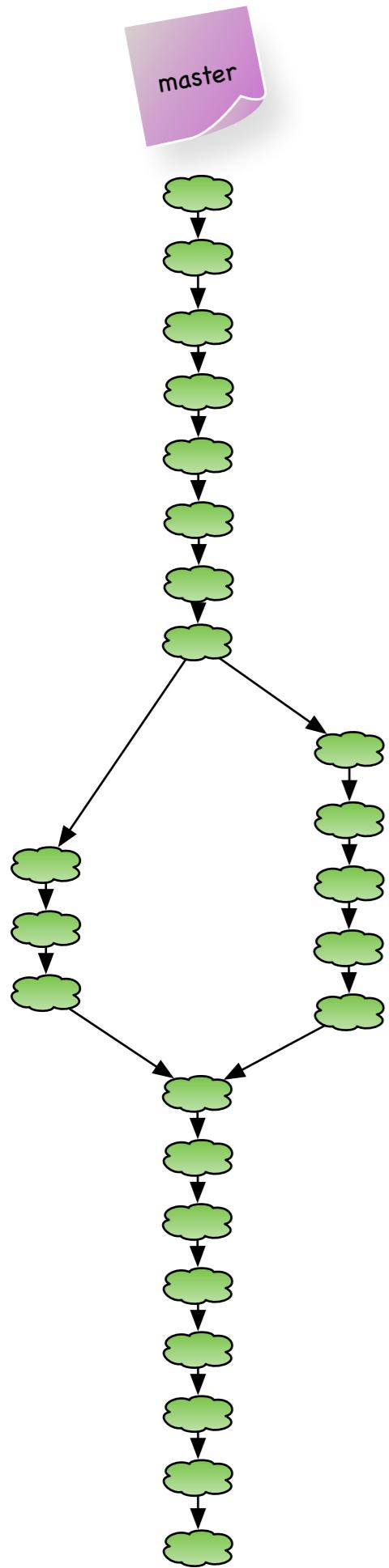


here be bugs

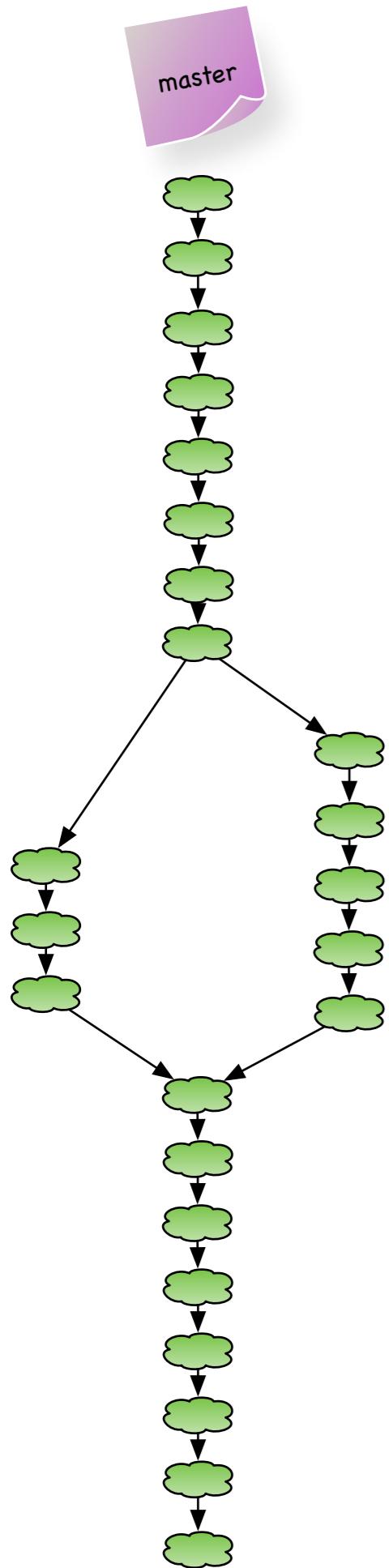


**Scenario:  
global thermonuclear war**





```
$ git filter-branch -f --tree-filter 'rm -f id_rsa' master
```



```
$ git filter-branch -f --index-filter 'git rm --cached \  
--ignore-unmatch id_rsa' master
```

