

Branches Demystified



Paolo Perrotta

Freelance Developer

@nusco

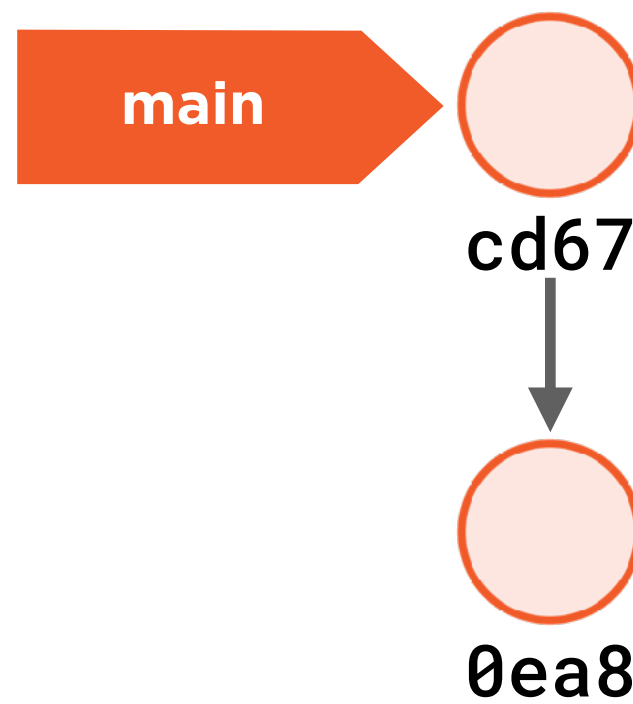
Git Is...

...a Revision Control System



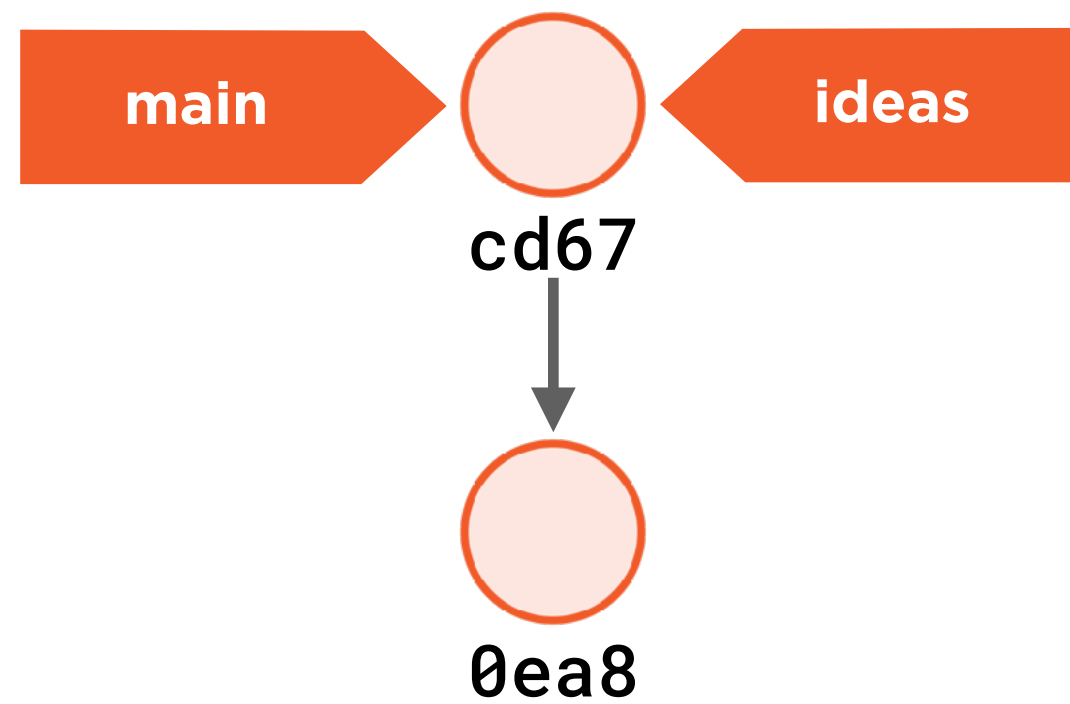
Git branches might not be
what you think they are

The Main Branch



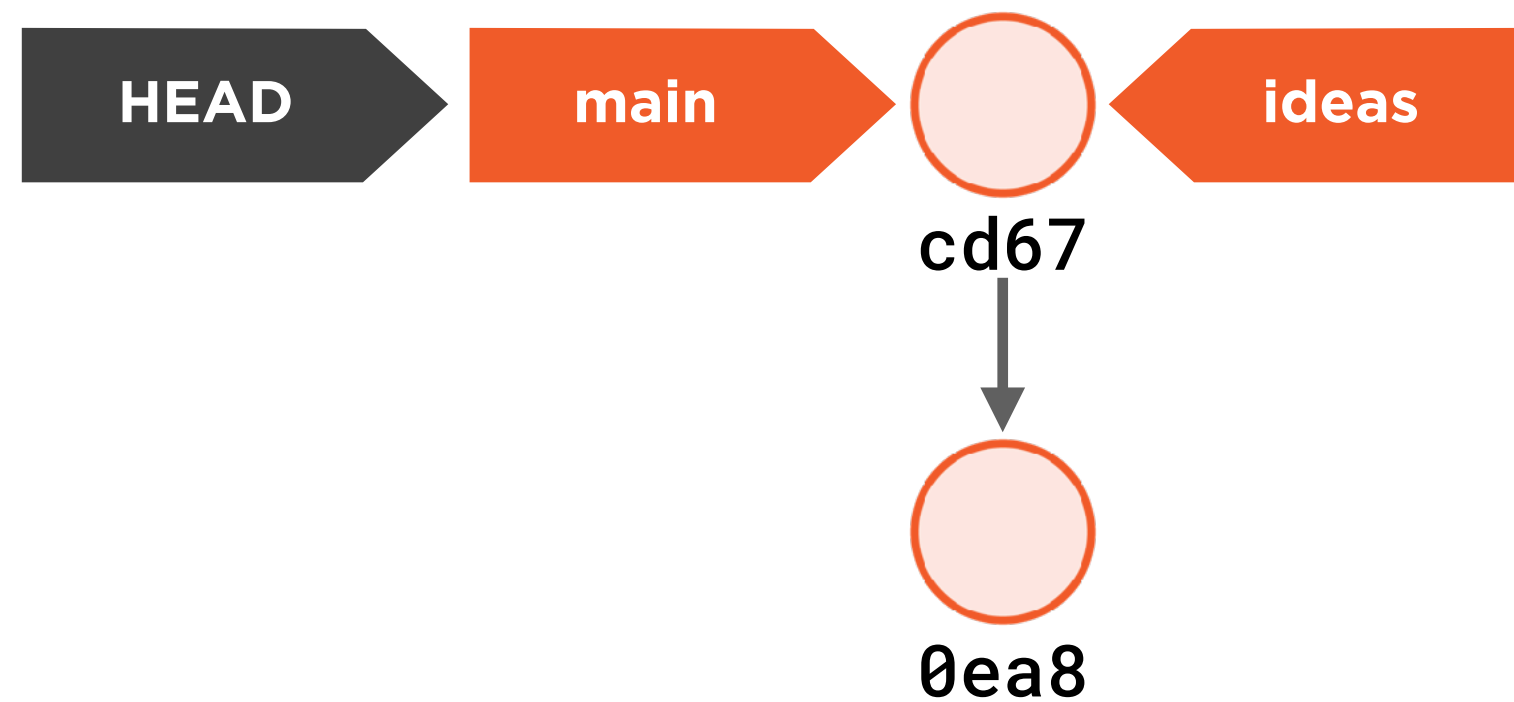
A branch is just a
reference to a commit

A Second Branch

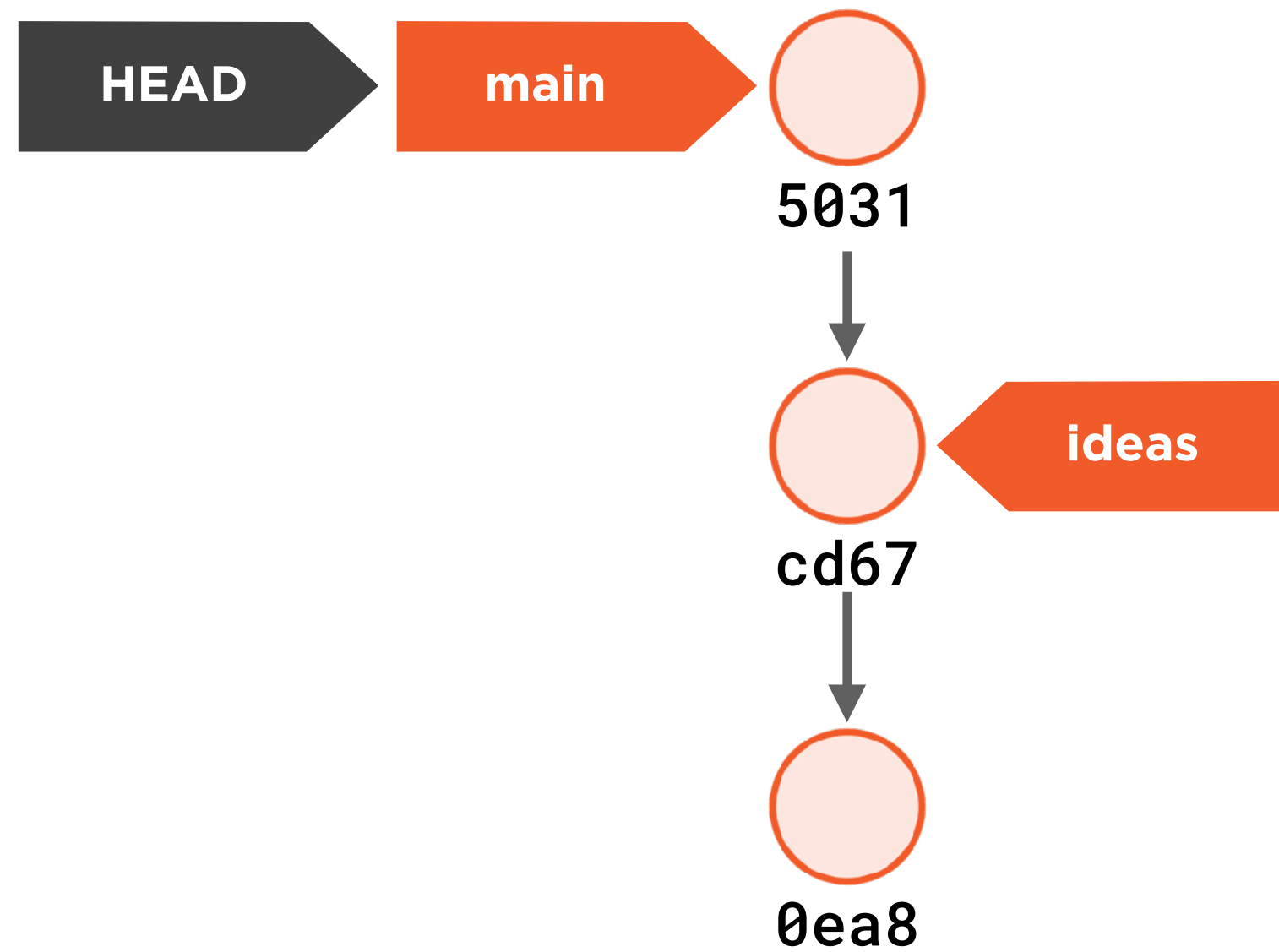


HEAD is just a reference to a branch

The Current Branch

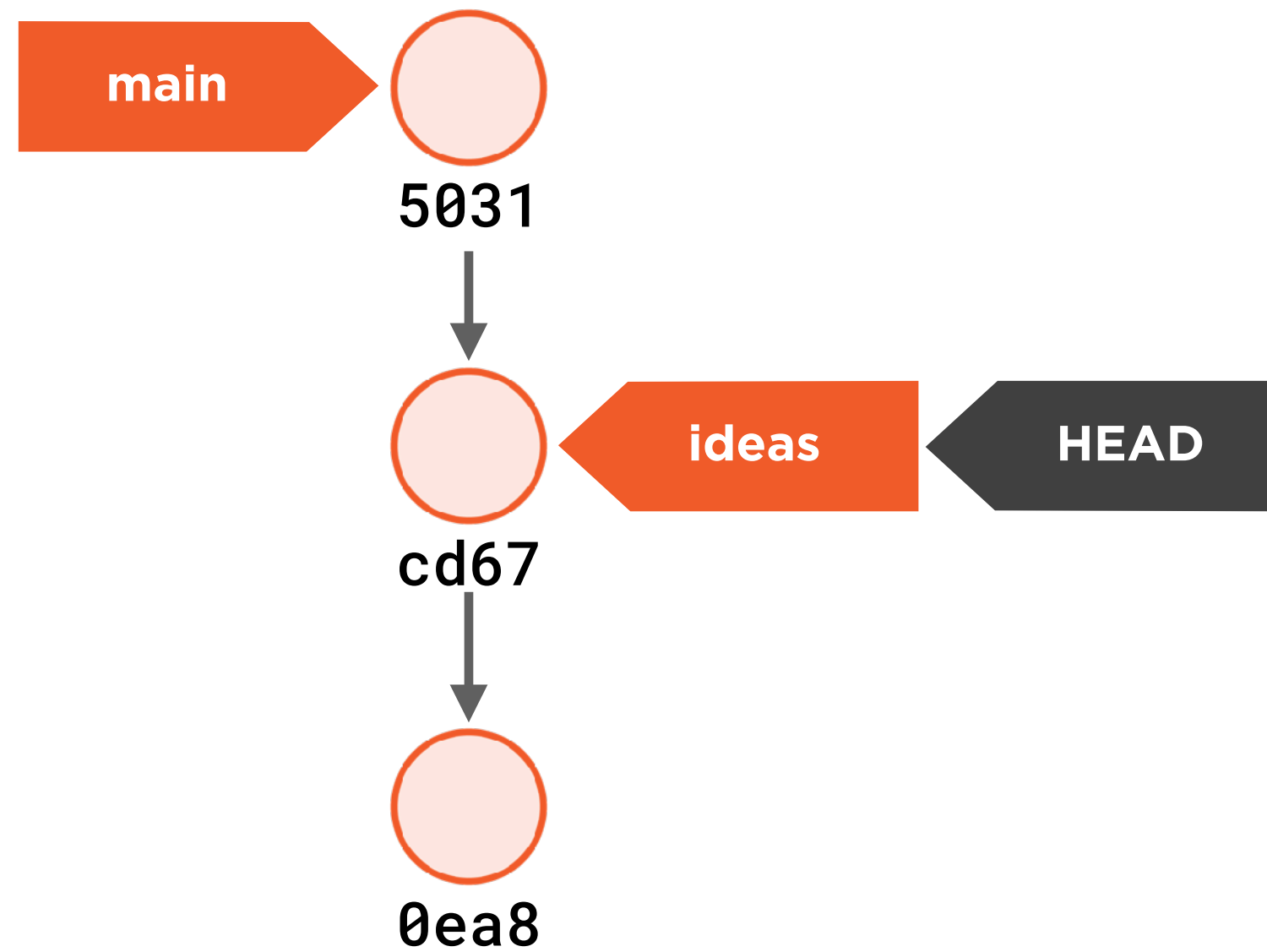


A New Commit

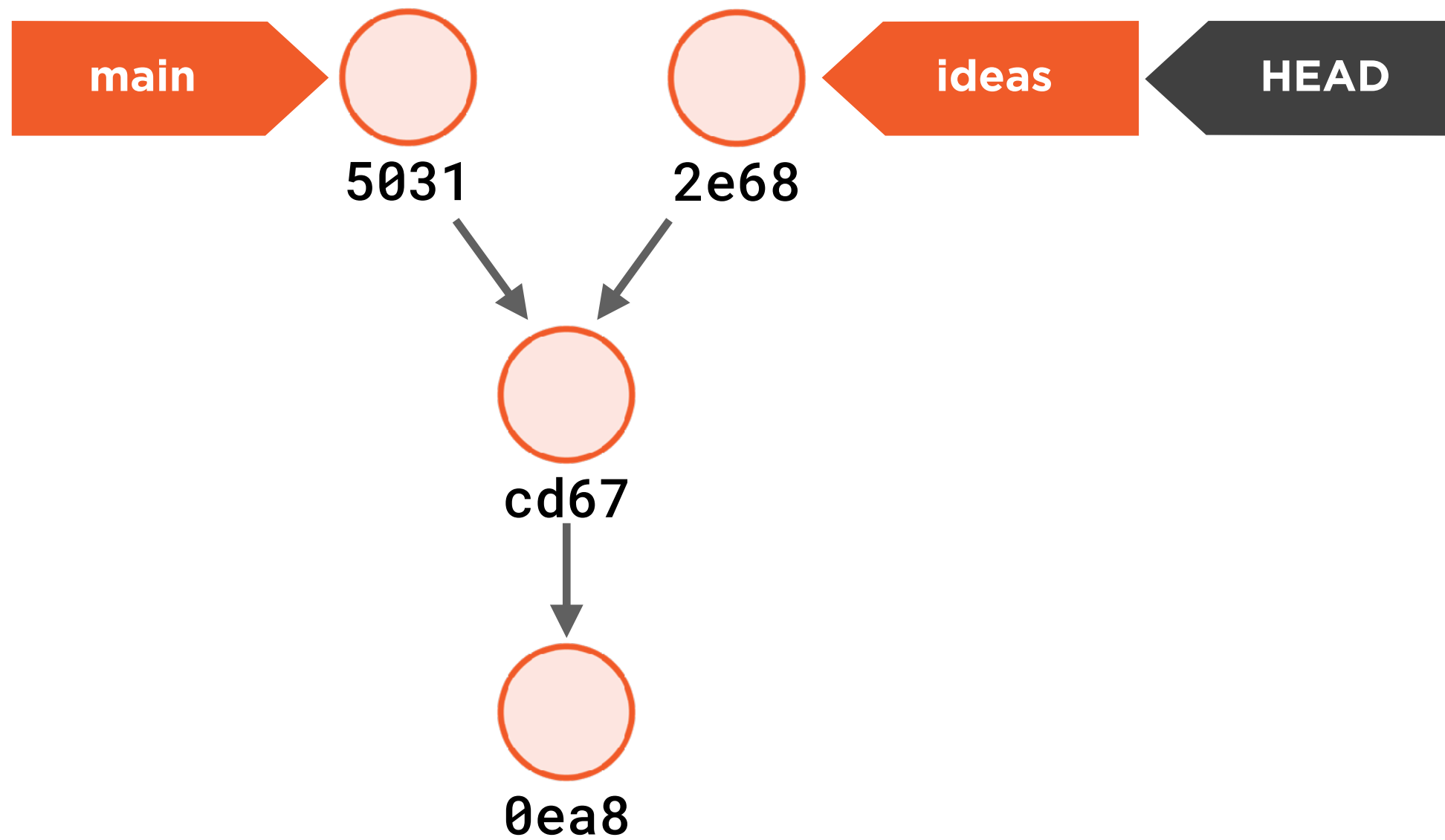


If you can't use *git switch*,
then use *git checkout* instead.

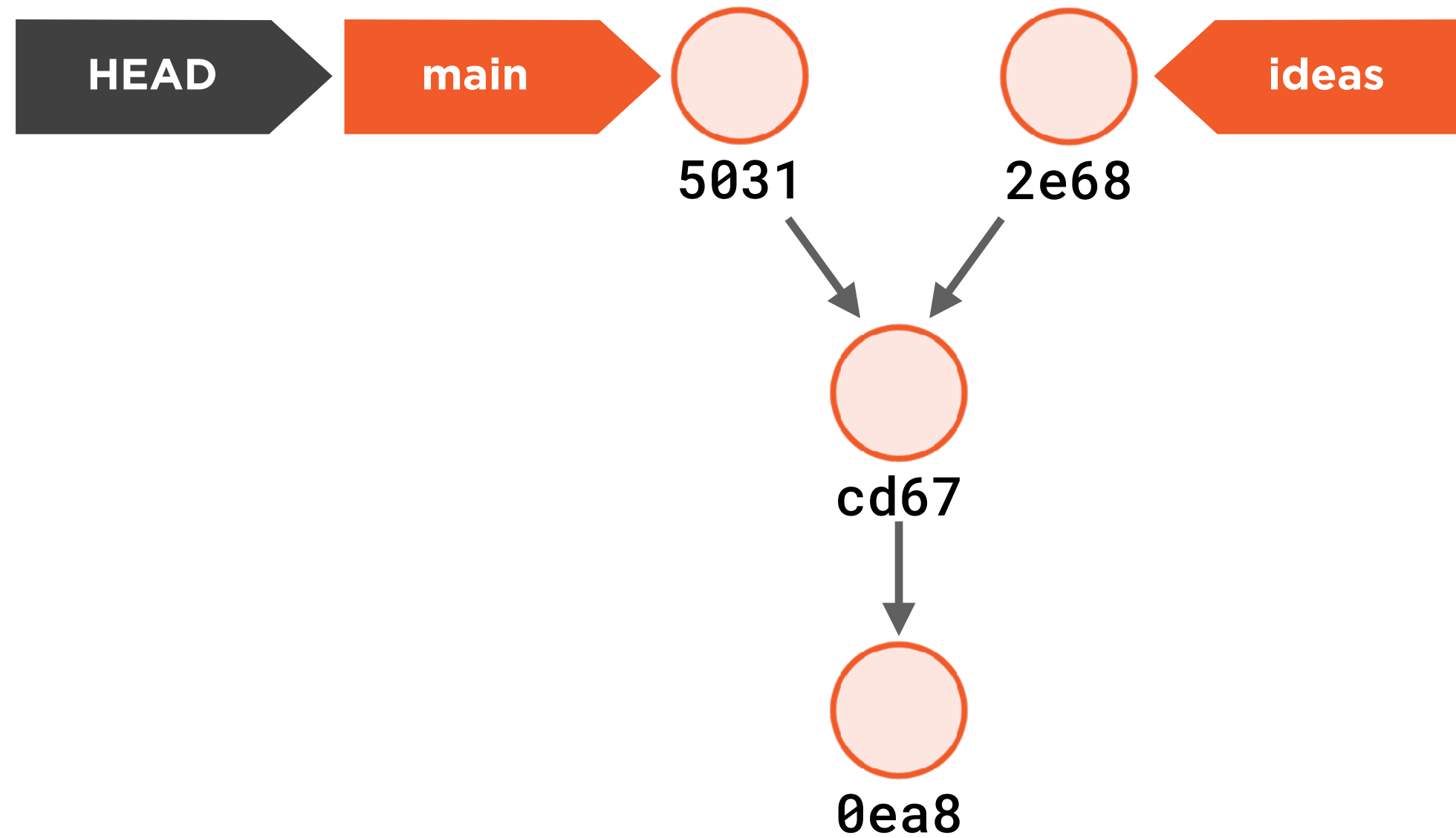
Switch



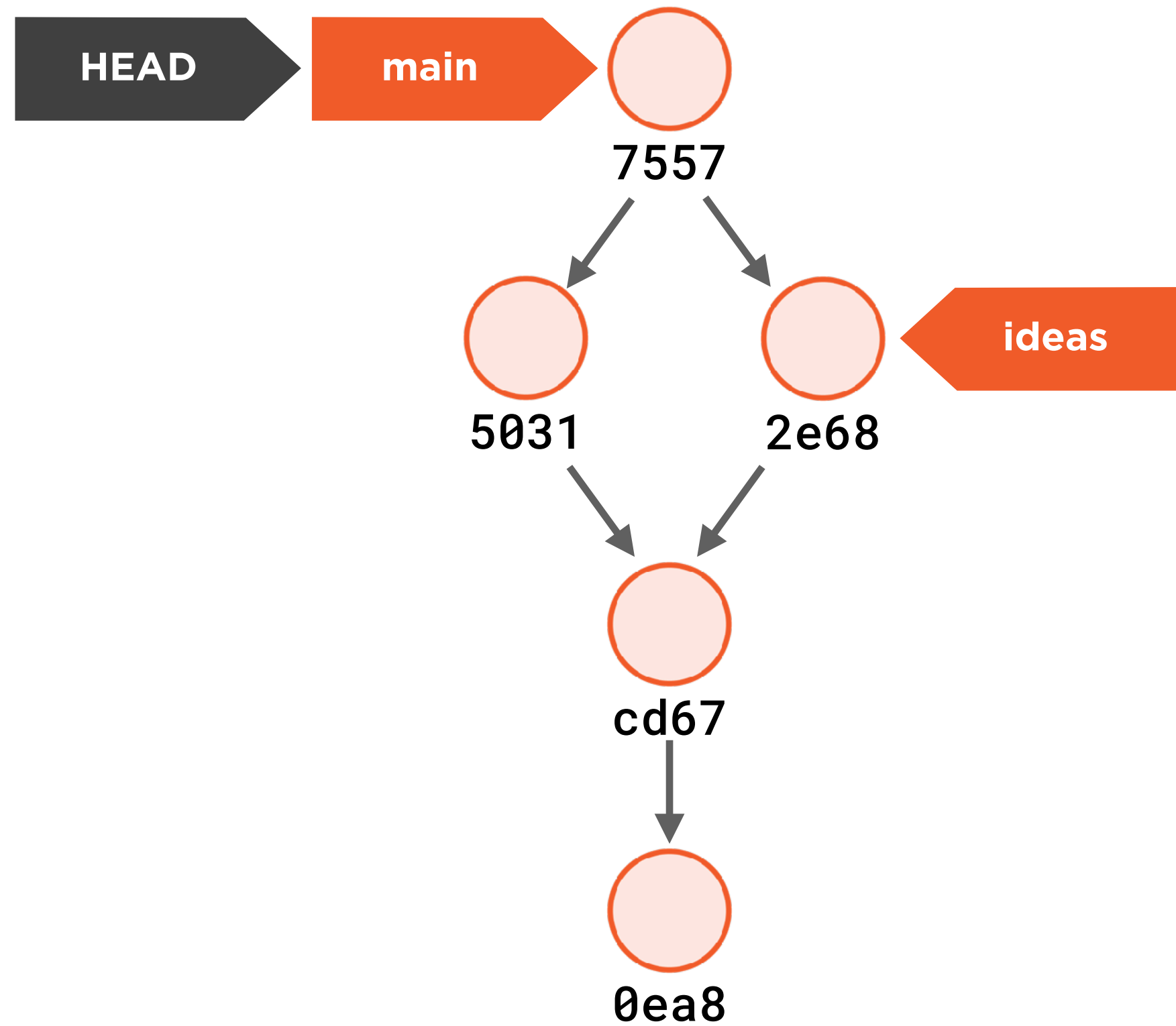
Branching



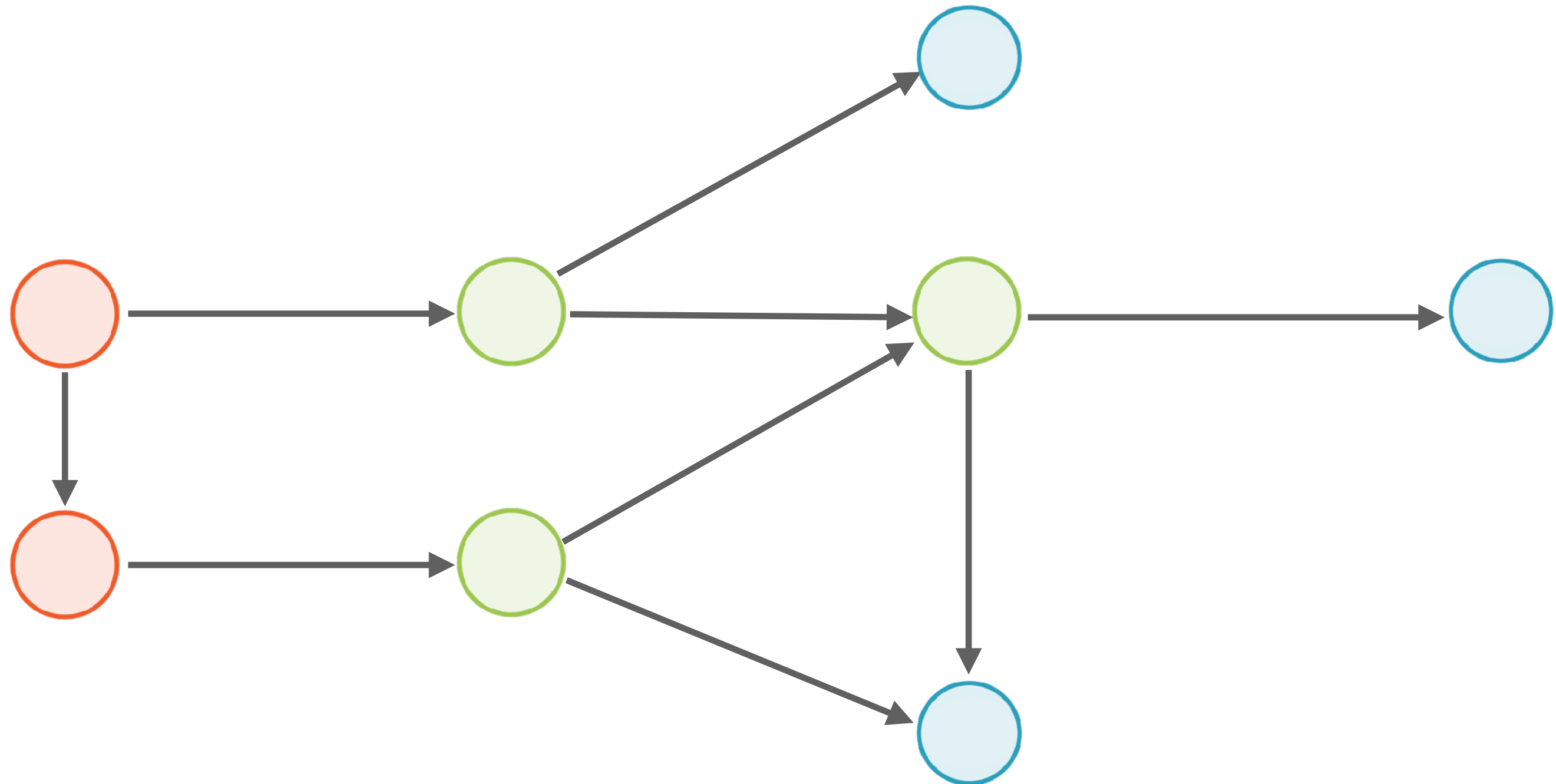
Switch



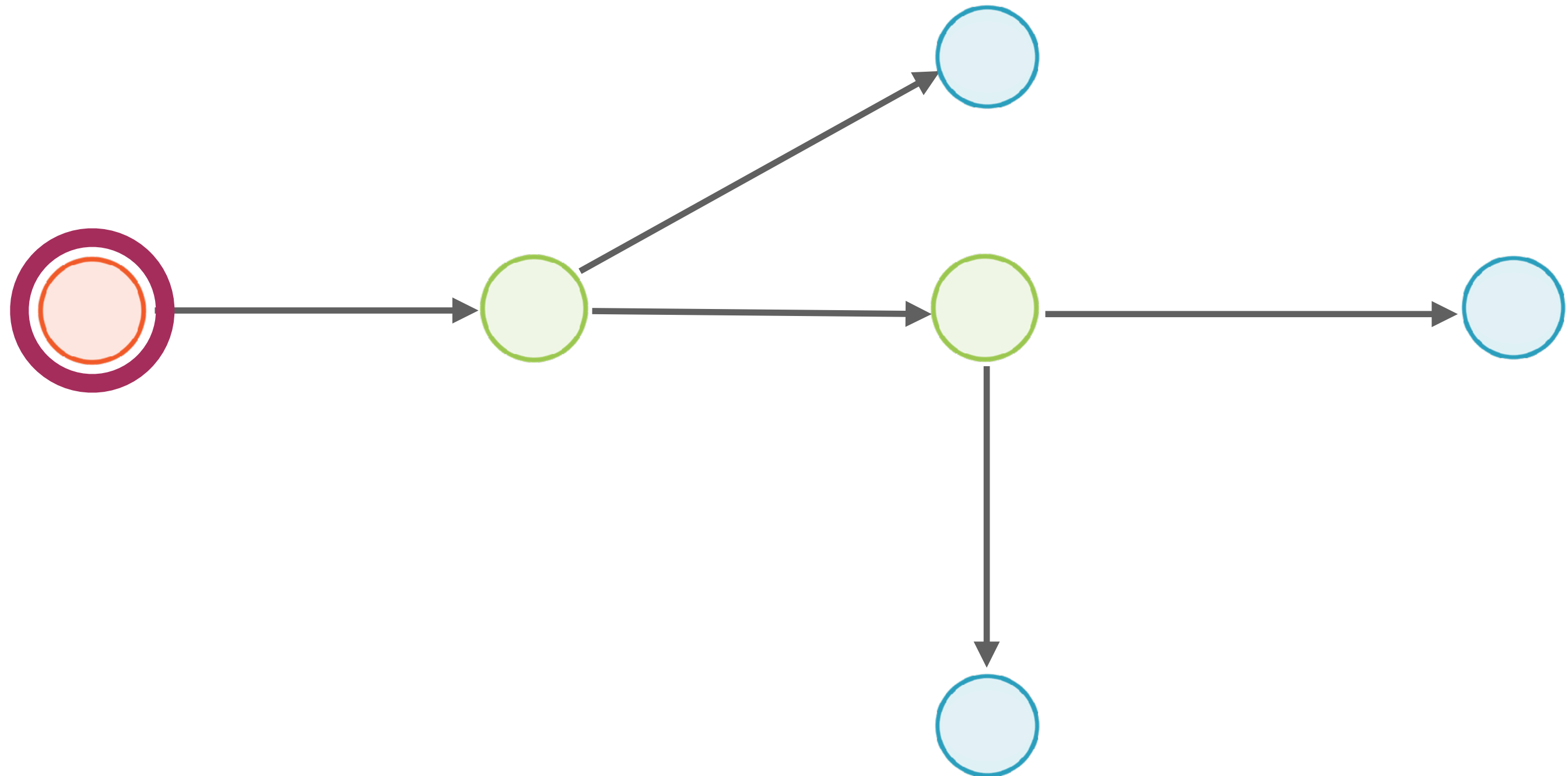
Merging



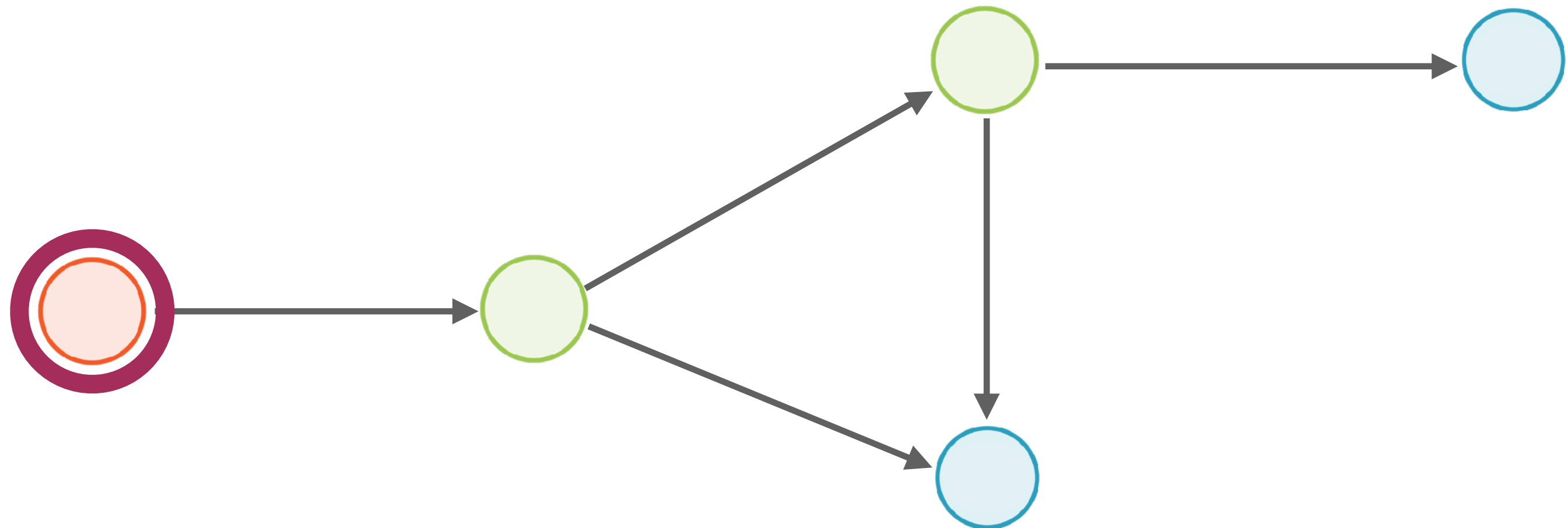
History and Content



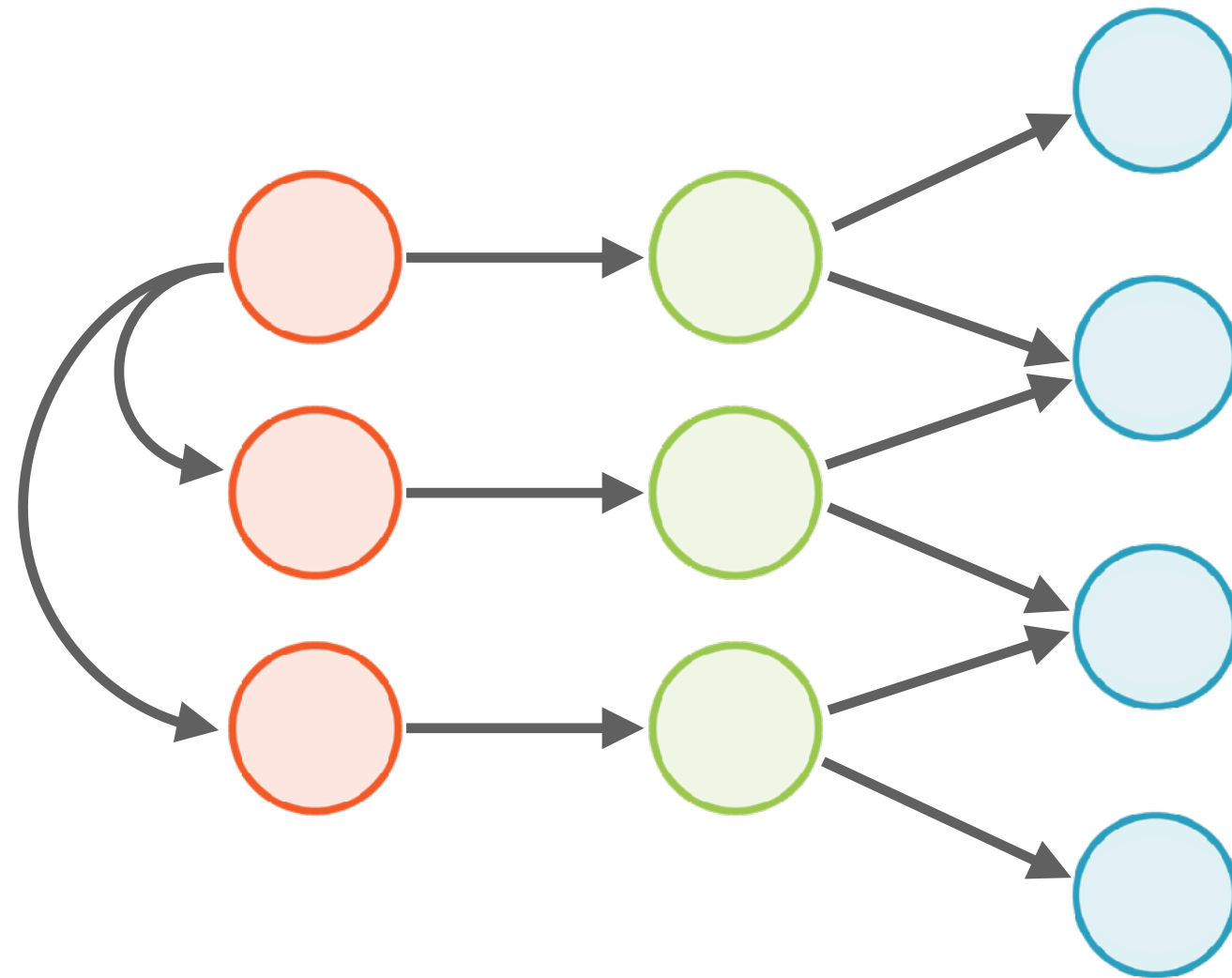
History and Content



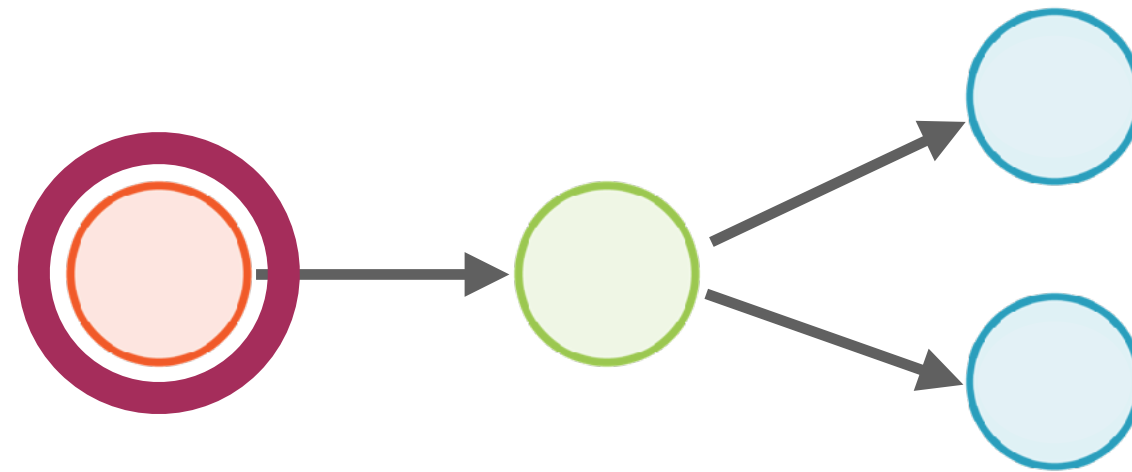
History and Content



Merge Commits



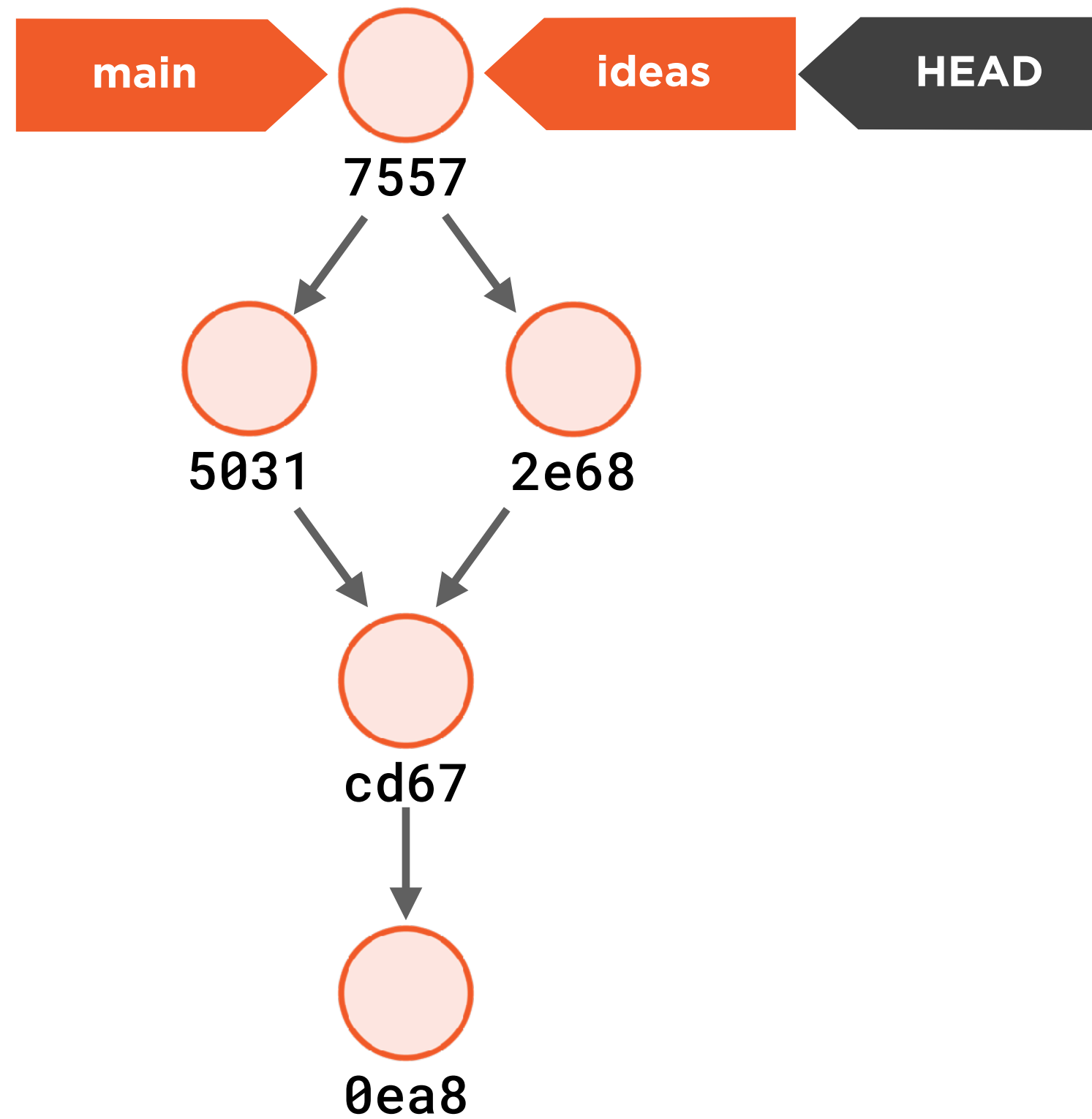
Merge Commits



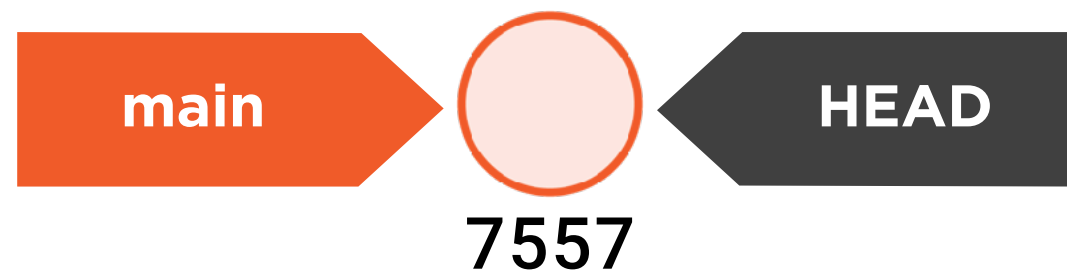
Git's content management is
simpler than it looks

Git (mostly) doesn't care
about your working directory

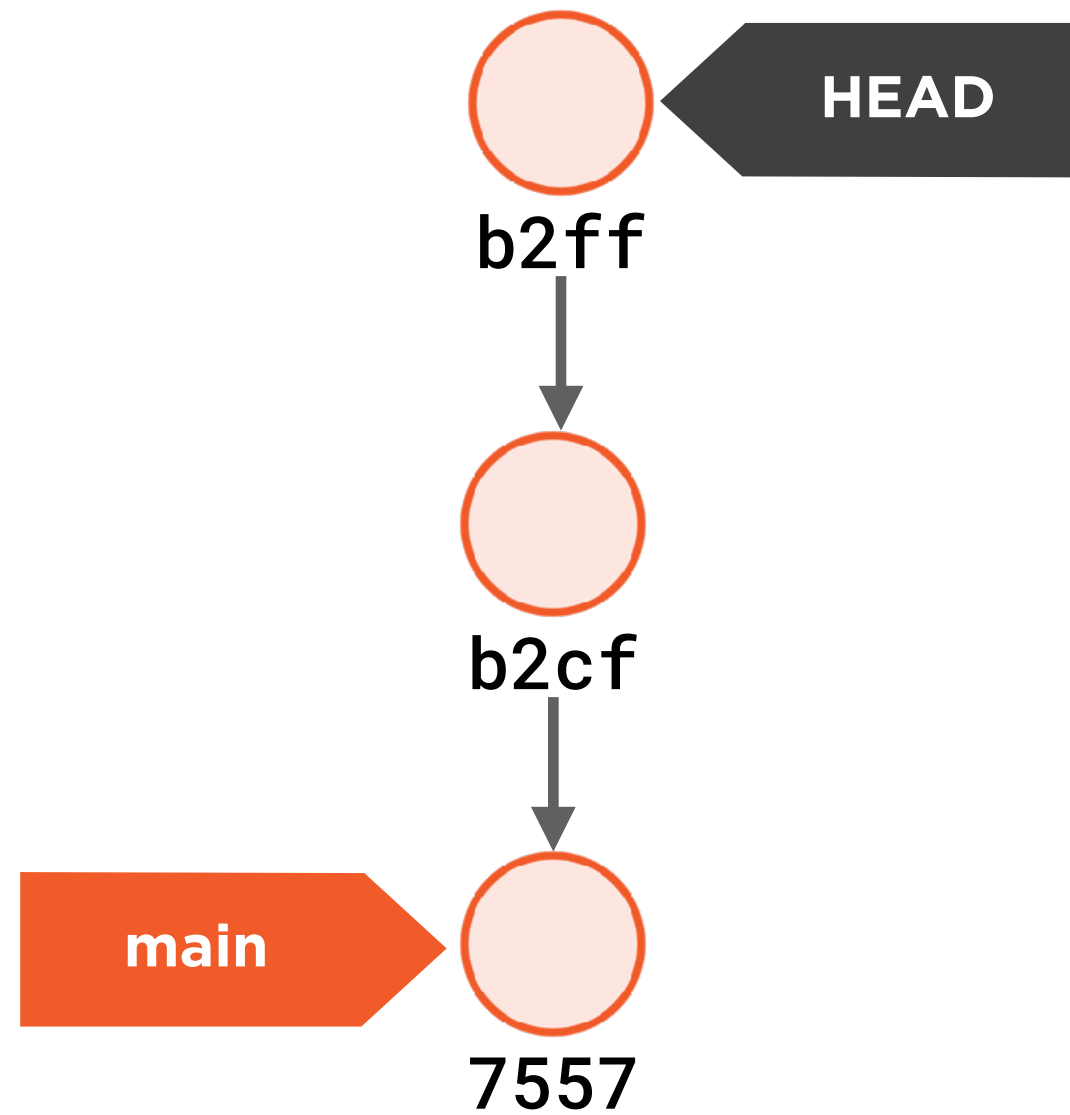
Fast-forward



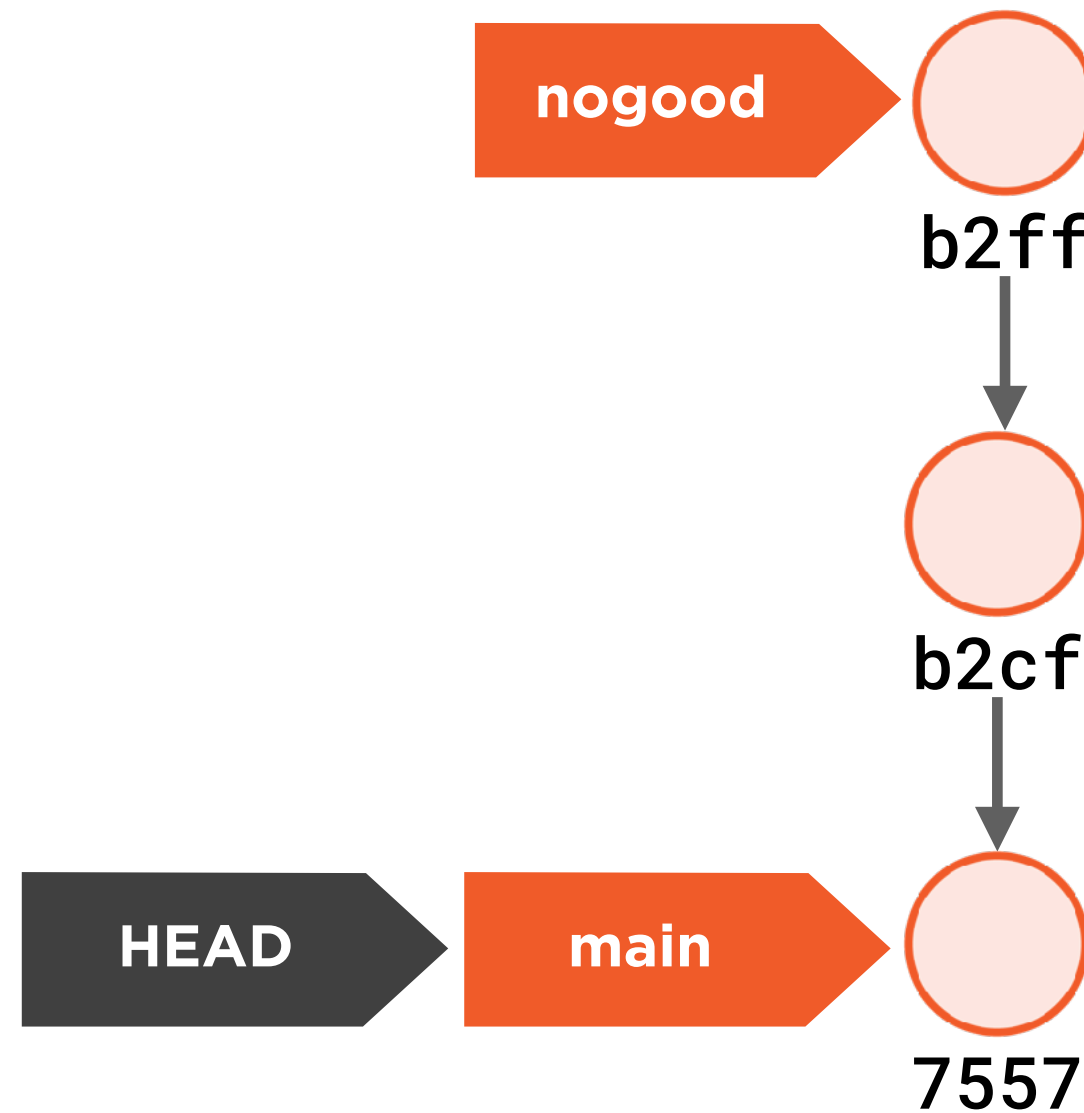
Detached HEAD



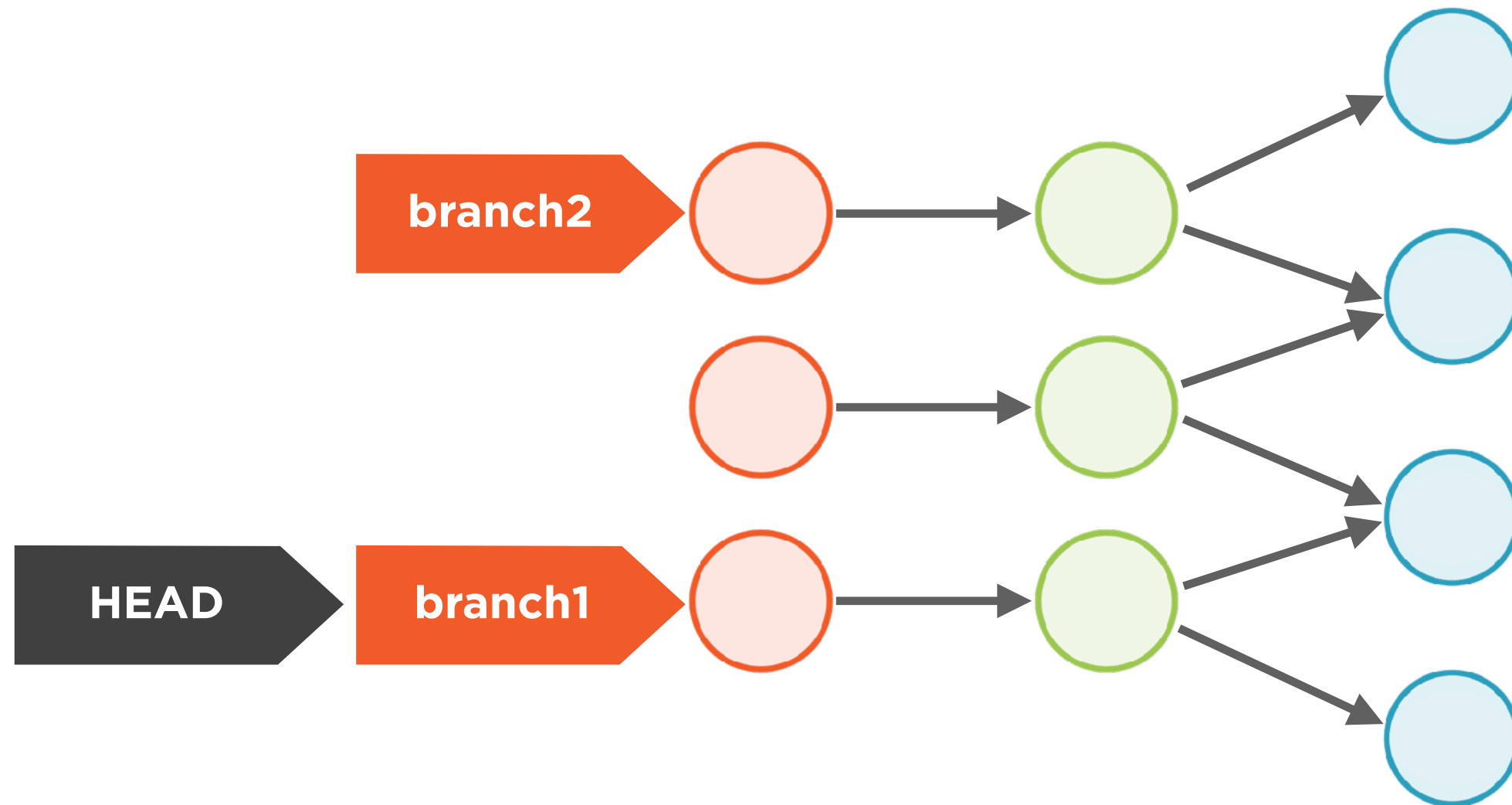
Detached HEAD



Detached HEAD



The Git Object Model, Extended



Three Rules

The current branch tracks new commits

When you move to another commit, Git updates your working directory

Unreachable objects are garbage collected