```
$ curl cheat.sh/
cheat.sheets:git
# Set your identity.
git config --global user.name "John Doe"
git config --global user.email johndoe@example.com
# Set your editor.
git config --global core.editor emacs
# Enable color support for commands like `git diff`. Disable with `never` or
# partially disable -- unless otherwise applied -- with `false`.
git config --global color.ui true
# Stage all changes for commit.
git add [--all|-A]
# Stash changes locally. This will keep the changes in a separate changelist, -
# called 'stash', and the working directory is cleaned. You can apply changes
# from the stash at any time.
git stash
# Stash changes with a message.
git stash save "message"
# List all the stashed changes.
git stash list
```

```
# Apply the most recent change and remove the stash from the stash list.
git stash pop
# Apply stash from the stash list, but does not remove the stash from the list.
git stash apply stash@{6}
# Commit staged changes.
git commit -m "Your commit message"
# Edit previous commit message.
git commit --amend
# Commit in the past. Newer versions of Git allow `--date="2 days ago"` usage.
git commit --date="`date --date='2 day ago'`"
git commit --date="Jun 13 18:30:25 IST 2015"
# Change the date of an existing commit.
git filter-branch --env-filter \
  'if [ $GIT_COMMIT = 119f9ecf58069b265ab22f1f97d2b648faf932e0 ]
  then
    export GIT_AUTHOR_DATE="Fri Jan 2 21:38:53 2009 -0800"
    export GIT_COMMITTER_DATE="Sat May 19 01:01:01 2007 -0700"
  fi'
```

Remove staged and working directory changes.

```
git reset --hard
# Go 2 commits back.
git reset --hard HEAD~2
# Remove untracked files.
git clean -f -d
# Remove untracked and ignored files.
git clean -f -d -x
# Push to the tracked master branch.
git push origin master
# Push to a specified repository.
git push git@github.com:[USER_NAME]/[REPO_NAME].git
# Delete the branch "branch_name".
git branch -D [BRANCH]
# Make an existing branch track a remote branch.
git branch -u upstream/foo
# List all local and remote branches.
git branch -a
```

```
# See who committed which line in a file.
git blame [FILE]
# Sync a fork with the master repo.
git remote add upstream git@github.com:name/repo.git # <-- Set a new repo.
git remote -v # <-- Confirm new remote repo.
git fetch upstream # <-- Get branches.
git branch -va # <-- List local - remote branches.
git checkout master # <-- Checkout local master branch.
git checkout -b new_branch # <-- Create and checkout a new branch.
git merge upstream/master # <-- Merge remote into local repo.
git show 83fb499 # <-- Show what a commit did.
git show 83fb499:path/to/file.ext # <-- Show the file as it was in 83fb499.
git diff branch_1 branch_2 # <-- Check difference between branches.
git log # <-- Show all of the commits.
git status # <-- Show the changes from the last commit.
# Display the commit history of a set of files.
git log --pretty=email --patch-with-stat --reverse --full-index -- Admin\*.py > Sripts.patch
# Import commits from another repo.
git --git-dir=../some_other_repo/.git format-patch -k -1 --stdout <commit SHA> | git am -3 -k
# View commits which would be pushed.
git log @{u}..
```

```
git log -p feature --not master
git diff master...feature
# Interactive rebase for the last 7 commits.
git rebase -i @~7
# Show changes to files WITHOUT considering them a part of git. This can be
# used to diff files which are not part of a git repo!
git diff --no-index path/to/file/A path/to/file/B
# Pull changes, while overwriting any local commits.
git fetch --all
git reset --hard origin/master
# Update all submodules.
git submodule update --init --recursive
# Perform a shallow clone, to only get the latest commits, which helps to save
# data (good for limited data connections) when cloning large repos.
git clone --depth 1 < remote-url>
# Unshallow a clone.
git pull --unshallow
# Create a bare branch; without any commits.
```

View changes which are new on a feature branch.

```
git checkout --orphan branch_name
# Checkout a new branch from a different starting point.
git checkout -b master upstream/master
# Reset local branch to upstream branch, then checkout it.
git checkout -B master upstream/master
# Remove all stale branches; ones that have been deleted on remote. So if you
# have a lot of useless branches, delete them on GitHub and then run this.
git remote prune origin
# Prune all remotes at once.
git remote prune $(git remote | tr '\n' ' ')
# Revisions can also be identified with `:/text`. So, this will show the first
# commit that has the string "cool" in its message body.
git show:/cool
# Undo parts of the last commit in a specific file.
git checkout -p HEAD^ -- /path/to/file
# Revert a commit, but keep the history of the event as a separate commit.
git revert < commit SHA>
# Apply only the changes made within a given commit. This is different to the
```

```
#`merge` command, as it would otherwise apply all commits from a branch.
git cherry-pick [HASH]
# Undo last commit. If you want to nuke commit C to never see it again:
# (F)
# A-B-C
# master
git reset --hard HEAD~1
# Undo last commit. If you want to undo the commit, but keep your changes:
# (F)
# A-B-C
# 1
# master
git reset HEAD~1
# List files changed in a given commit.
git diff-tree --no-commit-id --name-only -r [HASH]
# Porcelain-ly List files changed in a given commit; user-facing approach.
git show --pretty="" --name-only bd61ad98
# See everything you have done, across branches, in a glance, then go to the
# place right before you broke everything.
git reflog
```

```
git reset HEAD@{hash}
# Move your most recent commit from one branch, to stage it on [BRANCH].
git reset HEAD~ --soft
git stash
git checkout [BRANCH]
git stash pop
git add.
cheat:git
tags: [vcs]
# To set your identity:
git config --global user.name <name>
git config --global user.email <email>
# To set your editor:
git config --global core.editor <editor>
# To enable color:
git config --global color.ui true
# To stage all changes for commit:
git add --all
```

```
# To stash changes locally, this will keep the changes in a separate changelist
# called stash and the working directory is cleaned. You can apply changes
# from the stash anytime
git stash
# To stash changes with a message:
git stash push -m <message>
# To list all the stashed changes:
git stash list
# To apply the most recent change and remove the stash from the stash list:
git stash pop
# To apply any stash from the list of stashes. This does not remove the stash
# from the stash list
git stash apply stash@{6}
# To commit staged changes:
git commit -m <message>
# To edit previous commit message:
git commit --amend
# Git commit in the past
git commit --date="`date --date='2 day ago'`"
```

```
git commit --date="Jun 13 18:30:25 IST 2015"
# more recent versions of Git also support -- date="2 days ago" directly
# To change the date of an existing commit:
git filter-branch --env-filter \
  'if [ $GIT_COMMIT = 119f9ecf58069b265ab22f1f97d2b648faf932e0 ]
  then
    export GIT_AUTHOR_DATE="Fri Jan 2 21:38:53 2009 -0800"
    export GIT_COMMITTER_DATE="Sat May 19 01:01:01 2007 -0700"
  fi'
# To remove staged and working directory changes:
git reset --hard
# To go 2 commits back:
git reset --hard HEAD~2
# Checkout the fb branch, and rebase from <remote>
git reset --hard <remote>/<branch>
# To revert first/initial commit on a branch:
# Running git reset --hard HEAD~1 will give error:
# fatal: ambiguous argument 'HEAD~1': unknown revision or path not in the working tree.
git update-ref -d HEAD
# To remove untracked files:
```

```
git clean -f -d
# To remove untracked and ignored files:
git clean -f -d -x
# To push to the tracked master branch:
git push origin master
# To push to a specified repository:
git push git@github.com:<username>/<repo>.git
# Tags: Tag a commit
git tag -a <tag> <commit> -m "<commit message>"
# Tags: To push a tag to remote:
git push origin <tagname>
# Tags: To delete a tag < tagname > on remote
git push --delete origin <tagname>
# Tags: To delete a tag locally
git tag -d <tagname>
# To force a push:
git push -f
```

```
# Branches: To delete the branch < branch >:
git branch -D <br/>branch>
# Branches: To delete a local <branch>:
git branch -d <branch>
# Branches: To delete a remote branch <branch>:
git push --delete origin <br/> <br/>branch>
# Branches: To delete all branches on remote that are already merged:
git branch --merged | egrep -v "(^*|main|dev)" | xargs git branch -d
# Branches: To make an exisiting branch track a remote branch:
git branch -u upstream/foo
# To see who commited which line in a file:
git blame <file>
# To sync a fork with the master repo:
git remote add upstream git@github.com:<username>/<repo>.git # Set a new repo
git remote -v
                                  # Confirm new remote repo
git fetch upstream
                                      # Get branches
git branch -va
                                   # List local - remote branches
git checkout master
                                       # Checkout local master branch
git checkout -b new_branch
                                            # Create and checkout a new branch
git merge upstream/master
                                            # Merge remote into local repo
```

```
git show 83fb499
git show 83fb499:path/fo/file.ext
                                              # Shows the file as it appeared at 83fb499.
git diff branch_1 branch_2
                                           # Check difference between branches
                                # Show all the commits
git log
                                  # Show the changes from last commit
git status
# To view the commit history of a set of files:
git log --pretty=email --patch-with-stat --reverse --full-index -- Admin\*.py > Sripts.patch
# To import commits from another repo:
git --git-dir=../some_other_repo/.git format-patch -k -1 --stdout <commit SHA> | git am -3 -k
# To view commits that will be pushed:
git log @{u}..
# To view changes that are new on a feature branch:
git log -p feature --not master
git diff master...feature
# To perform an interactive rebase for the prior 7 commits:
git rebase -i @~7
# To diff files WITHOUT considering them a part of git:
# This can be used to diff files that are not in a git repo!
git diff --no-index path/to/file/A path/to/file/B
```

Show what a commit did.

```
# To pull changes while overwriting any local commits:
git fetch --all
git reset --hard origin/master
# To pull down a remote branch, but rebase any locally differing commits onto
# the top of the incoming commits:
git pull <remote> <branch> --rebase
# To update all submodules:
git submodule update --init --recursive
# To perform a shallow clone to only get latest commits:
# (helps save data when cloning large repos)
git clone --depth 1 < remote-url>
# To unshallow a clone:
git pull --unshallow
# To create a bare branch (one that has no commits on it):
git checkout --orphan branch_name
# To checkout a new branch from a different starting point:
git checkout -b master upstream/master
# To remove all stale branches (ones that have been deleted on remote): So if
# you have a lot of useless branches, delete them on Github and then run this:
```

```
git remote prune origin
# To prune all remotes at once:
git remote prune $(git remote | tr '\n' ' ')
# Revisions can also be identified with:/text
# So, this will show the first commit that has "cool" in their message body
git show:/cool
# To undo parts of last commit in a specific file:
git checkout -p HEAD^ -- /path/to/file
# To revert a commit and keep the history of the reverted change as a separate revert
commit:
git revert < commit SHA>
# To pick a commit from a branch to current branch. This is different than
# merge as this just applies a single commit from a branch to current branch:
git cherry-pick < commit SHA1>
# Change author of a commit:
git commit --amend --author="Author Name <email@address.com>"
# The GPG key used for signing your commits
git config --global user.signingkey 0A46826A
```

```
# Sign new tags:
git tag -s v1.5 -m 'my signed 1.5 tag'
# Sign a commit:
git commit -a -S -m 'Signed commit'
# check any signatures it finds and list them in its output:
git log --pretty="format:%h %G? %aN %s"
# Defined the key to use for signing commits:
git config user.signingkey [KEYID]
# Set signing of commits globally:
git config --global commit.gpgsign true
# To list unstracked files:
git ls-files --others --exclude-standard
tldr:git
# git
# Distributed version control system.
# Some subcommands such as `commit`, `add`, `branch`, `checkout`, `push`, etc.
have their own usage documentation, accessible via `tldr git subcommand`.
# More information: <a href="https://git-scm.com/">https://git-scm.com/>.
# Check the Git version:
```

```
git --version
# Show general help:
git --help
# Show help on a Git subcommand (like `clone`, `add`, `push`, `log`, etc.):
git help subcommand
# Execute a Git subcommand:
git subcommand
# Execute a Git subcommand on a custom repository root path:
git -C path/to/repo subcommand
# Execute a Git subcommand with a given configuration set:
git -c 'config.key=value' subcommand
$
$ curl cheat.sh/
cheat.sheets:git
# Set your identity.
git config --global user.name "John Doe"
git config --global user.email johndoe@example.com
# Set your editor.
git config --global core.editor emacs
```

```
# Enable color support for commands like `git diff`. Disable with `never` or
# partially disable -- unless otherwise applied -- with `false`.
git config --global color.ui true
# Stage all changes for commit.
git add [--all|-A]
# Stash changes locally. This will keep the changes in a separate changelist, -
# called 'stash', and the working directory is cleaned. You can apply changes
# from the stash at any time.
git stash
# Stash changes with a message.
git stash save "message"
# List all the stashed changes.
git stash list
# Apply the most recent change and remove the stash from the stash list.
git stash pop
# Apply stash from the stash list, but does not remove the stash from the list.
git stash apply stash@{6}
# Commit staged changes.
```

```
git commit -m "Your commit message"
# Edit previous commit message.
git commit --amend
# Commit in the past. Newer versions of Git allow `--date="2 days ago"` usage.
git commit --date="`date --date='2 day ago'`"
git commit --date="Jun 13 18:30:25 IST 2015"
# Change the date of an existing commit.
git filter-branch --env-filter \
 'if [ $GIT_COMMIT = 119f9ecf58069b265ab22f1f97d2b648faf932e0 ]
  then
    export GIT_AUTHOR_DATE="Fri Jan 2 21:38:53 2009 -0800"
    export GIT_COMMITTER_DATE="Sat May 19 01:01:01 2007 -0700"
  fi'
# Remove staged and working directory changes.
git reset --hard
# Go 2 commits back.
git reset --hard HEAD~2
# Remove untracked files.
git clean -f -d
```

```
# Remove untracked and ignored files.
git clean -f -d -x
# Push to the tracked master branch.
git push origin master
# Push to a specified repository.
git push git@github.com:[USER_NAME]/[REPO_NAME].git
# Delete the branch "branch_name".
git branch -D [BRANCH]
# Make an existing branch track a remote branch.
git branch -u upstream/foo
# List all local and remote branches.
git branch -a
# See who committed which line in a file.
git blame [FILE]
# Sync a fork with the master repo.
git remote add upstream git@github.com:name/repo.git # <-- Set a new repo.
git remote -v # <-- Confirm new remote repo.
git fetch upstream # <-- Get branches.
git branch -va # <-- List local - remote branches.
```

```
git checkout -b new_branch # <-- Create and checkout a new branch.
git merge upstream/master # <-- Merge remote into local repo.
git show 83fb499 # <-- Show what a commit did.
git show 83fb499:path/to/file.ext # <-- Show the file as it was in 83fb499.
git diff branch_1 branch_2 # <-- Check difference between branches.
git log # <-- Show all of the commits.
git status # <-- Show the changes from the last commit.
# Display the commit history of a set of files.
git log --pretty=email --patch-with-stat --reverse --full-index -- Admin\*.py > Sripts.patch
# Import commits from another repo.
git --git-dir=../some_other_repo/.git format-patch -k -1 --stdout <commit SHA> | git am -3 -k
# View commits which would be pushed.
git log @{u}..
# View changes which are new on a feature branch.
git log -p feature --not master
git diff master...feature
# Interactive rebase for the last 7 commits.
git rebase -i @~7
# Show changes to files WITHOUT considering them a part of git. This can be
```

git checkout master # <-- Checkout local master branch.

```
# used to diff files which are not part of a git repo!
git diff --no-index path/to/file/A path/to/file/B
# Pull changes, while overwriting any local commits.
git fetch --all
git reset --hard origin/master
# Update all submodules.
git submodule update --init --recursive
# Perform a shallow clone, to only get the latest commits, which helps to save
# data (good for limited data connections) when cloning large repos.
git clone --depth 1 < remote-url>
# Unshallow a clone.
git pull --unshallow
# Create a bare branch; without any commits.
git checkout --orphan branch_name
# Checkout a new branch from a different starting point.
git checkout -b master upstream/master
# Reset local branch to upstream branch, then checkout it.
git checkout -B master upstream/master
```

```
# Remove all stale branches; ones that have been deleted on remote. So if you
# have a lot of useless branches, delete them on GitHub and then run this.
git remote prune origin
# Prune all remotes at once.
git remote prune $(git remote | tr '\n' ' ')
# Revisions can also be identified with `:/text`. So, this will show the first
# commit that has the string "cool" in its message body.
git show:/cool
# Undo parts of the last commit in a specific file.
git checkout -p HEAD^ -- /path/to/file
# Revert a commit, but keep the history of the event as a separate commit.
git revert < commit SHA>
# Apply only the changes made within a given commit. This is different to the
#`merge` command, as it would otherwise apply all commits from a branch.
git cherry-pick [HASH]
# Undo last commit. If you want to nuke commit C to never see it again:
# (F)
# A-B-C
# master
```

```
git reset --hard HEAD~1
# Undo last commit. If you want to undo the commit, but keep your changes:
# (F)
# A-B-C
# 1
# master
git reset HEAD~1
# List files changed in a given commit.
git diff-tree --no-commit-id --name-only -r [HASH]
# Porcelain-ly List files changed in a given commit; user-facing approach.
git show --pretty="" --name-only bd61ad98
# See everything you have done, across branches, in a glance, then go to the
# place right before you broke everything.
git reflog
git reset HEAD@{hash}
# Move your most recent commit from one branch, to stage it on [BRANCH].
git reset HEAD~ --soft
git stash
git checkout [BRANCH]
git stash pop
git add.
```

```
cheat:git
tags: [vcs]
# To set your identity:
git config --global user.name <name>
git config --global user.email <email>
# To set your editor:
git config --global core.editor <editor>
# To enable color:
git config --global color.ui true
# To stage all changes for commit:
git add --all
# To stash changes locally, this will keep the changes in a separate changelist
# called stash and the working directory is cleaned. You can apply changes
# from the stash anytime
git stash
# To stash changes with a message:
git stash push -m <message>
```

```
# To list all the stashed changes:
git stash list
# To apply the most recent change and remove the stash from the stash list:
git stash pop
# To apply any stash from the list of stashes. This does not remove the stash
# from the stash list
git stash apply stash@{6}
# To commit staged changes:
git commit -m <message>
# To edit previous commit message:
git commit --amend
# Git commit in the past
git commit --date="`date --date='2 day ago'`"
git commit --date="Jun 13 18:30:25 IST 2015"
# more recent versions of Git also support --date="2 days ago" directly
# To change the date of an existing commit:
git filter-branch --env-filter \
  'if [ $GIT_COMMIT = 119f9ecf58069b265ab22f1f97d2b648faf932e0 ]
  then
    export GIT_AUTHOR_DATE="Fri Jan 2 21:38:53 2009 -0800"
```

```
fi'
# To remove staged and working directory changes:
git reset --hard
# To go 2 commits back:
git reset --hard HEAD~2
# Checkout the fb branch, and rebase from <remote>
git reset --hard <remote>/<branch>
# To revert first/initial commit on a branch:
# Running git reset --hard HEAD~1 will give error:
# fatal: ambiguous argument 'HEAD~1': unknown revision or path not in the working tree.
git update-ref -d HEAD
# To remove untracked files:
git clean -f -d
# To remove untracked and ignored files:
git clean -f -d -x
# To push to the tracked master branch:
git push origin master
```

export GIT_COMMITTER_DATE="Sat May 19 01:01:01 2007 -0700"

```
# To push to a specified repository:
git push git@github.com:<username>/<repo>.git
# Tags: Tag a commit
git tag -a <tag> <commit> -m "<commit message>"
# Tags: To push a tag to remote:
git push origin <tagname>
# Tags: To delete a tag < tagname > on remote
git push --delete origin <tagname>
# Tags: To delete a tag locally
git tag -d <tagname>
# To force a push:
git push -f
# Branches: To delete the branch <branch>:
git branch -D <br/>branch>
# Branches: To delete a local <branch>:
git branch -d <branch>
# Branches: To delete a remote branch < branch >:
git push --delete origin <br/> <br/>branch>
```

```
# Branches: To delete all branches on remote that are already merged:
git branch --merged | egrep -v "(^*|main|dev)" | xargs git branch -d
# Branches: To make an exisiting branch track a remote branch:
git branch -u upstream/foo
# To see who committed which line in a file:
git blame <file>
# To sync a fork with the master repo:
git remote add upstream git@github.com:<username>/<repo>.git # Set a new repo
git remote -v
                                  # Confirm new remote repo
git fetch upstream
                                     # Get branches
git branch -va
                                  # List local - remote branches
git checkout master
                                      # Checkout local master branch
                                           # Create and checkout a new branch
git checkout -b new_branch
git merge upstream/master
                                           # Merge remote into local repo
git show 83fb499
                                     # Show what a commit did.
git show 83fb499:path/fo/file.ext
                                            # Shows the file as it appeared at 83fb499.
git diff branch_1 branch_2
                                         # Check difference between branches
git log
                              # Show all the commits
git status
                                # Show the changes from last commit
# To view the commit history of a set of files:
```

git log --pretty=email --patch-with-stat --reverse --full-index -- Admin*.py > Sripts.patch

```
# To import commits from another repo:
git --git-dir=../some_other_repo/.git format-patch -k -1 --stdout <commit SHA> | git am -3 -k
# To view commits that will be pushed:
git log @{u}..
# To view changes that are new on a feature branch:
git log -p feature --not master
git diff master...feature
# To perform an interactive rebase for the prior 7 commits:
git rebase -i @~7
# To diff files WITHOUT considering them a part of git:
# This can be used to diff files that are not in a git repo!
git diff --no-index path/to/file/A path/to/file/B
# To pull changes while overwriting any local commits:
git fetch --all
git reset --hard origin/master
# To pull down a remote branch, but rebase any locally differing commits onto
# the top of the incoming commits:
git pull <remote> <branch> --rebase
```

```
# To update all submodules:
git submodule update --init --recursive
# To perform a shallow clone to only get latest commits:
# (helps save data when cloning large repos)
git clone --depth 1 < remote-url>
# To unshallow a clone:
git pull --unshallow
# To create a bare branch (one that has no commits on it):
git checkout --orphan branch_name
# To checkout a new branch from a different starting point:
git checkout -b master upstream/master
# To remove all stale branches (ones that have been deleted on remote): So if
# you have a lot of useless branches, delete them on Github and then run this:
git remote prune origin
# To prune all remotes at once:
git remote prune $(git remote | tr '\n' ' ')
# Revisions can also be identified with:/text
# So, this will show the first commit that has "cool" in their message body
git show:/cool
```

```
# To undo parts of last commit in a specific file:
git checkout -p HEAD^ -- /path/to/file
# To revert a commit and keep the history of the reverted change as a separate revert
commit:
git revert < commit SHA>
# To pick a commit from a branch to current branch. This is different than
# merge as this just applies a single commit from a branch to current branch:
git cherry-pick < commit SHA1>
# Change author of a commit:
git commit --amend --author="Author Name <email@address.com>"
# The GPG key used for signing your commits
git config --global user.signingkey 0A46826A
# Sign new tags:
git tag -s v1.5 -m 'my signed 1.5 tag'
# Sign a commit:
git commit -a -S -m 'Signed commit'
# check any signatures it finds and list them in its output:
git log --pretty="format:%h %G? %aN %s"
```

```
# Defined the key to use for signing commits:
git config user.signingkey [KEYID]
# Set signing of commits globally:
git config --global commit.gpgsign true
# To list unstracked files:
git ls-files --others --exclude-standard
tldr:git
# git
# Distributed version control system.
# Some subcommands such as `commit`, `add`, `branch`, `checkout`, `push`, etc.
have their own usage documentation, accessible via `tldr git subcommand`.
# More information: <a href="https://git-scm.com/">https://git-scm.com/>.
# Check the Git version:
git --version
# Show general help:
git --help
# Show help on a Git subcommand (like `clone`, `add`, `push`, `log`, etc.):
git help subcommand
```

Execute a Git subcommand:
git subcommand
Execute a Git subcommand on a custom repository root path:
git -C path/to/repo subcommand
Execute a Git subcommand with a given configuration set:
git -c 'config.key=value' subcommand
\$
v