

# A Simple PDF File

This is a small demonstration .pdf file -

just for use in the Virtual Mechanics tutorials. More text. And more text. And more text. And more text.

And more text. And more text. And more text. And more text. And more text. And more text. Boring, zzzzz. And more text. And more text. And more text. And more text. And more text. And more text.

And more text. And more text. And more text. And more text. And more text. And more text. And more text. Even more. Continued on page 2 ...



# Simple PDF File 2

...continued from page 1. Yet more text. And more text. And more text. And more text. And more text. And more text. And more text. Oh, how boring typing this stuff. But not as boring as watching paint dry. And more text. And more text. And more text. And more text. Boring. More, a little more text. The end, and just as well.



# Git Cheat Sheet



## GIT BASICS

<code>git init</code> <code>&lt;directory&gt;</code>	Create empty Git repo in specified directory. Run <code>git init</code> with no arguments to initialize the current directory as a git repository.
<code>git clone &lt;repo&gt;</code>	Clone repo located at <code>&lt;repo&gt;</code> onto local machine. If <code>&lt;repo&gt;</code> is a local repository, it clones the repository from the local filesystem. If <code>&lt;repo&gt;</code> is a remote repository, it clones the repository from the remote repository via HTTP or SSH.
<code>git config</code> <code>user.name &lt;name&gt;</code>	Define author name to be used for commits. <code>user.name</code> is commonly used as a global flag. <code>user.email</code> is commonly used as a global flag. <code>user.name</code> is commonly used as a global flag.
<code>git add</code> <code>&lt;directory&gt;</code>	Stage all changes in <code>&lt;directory&gt;</code> for the next commit. Replace <code>&lt;directory&gt;</code> with a file name to stage a specific file.
<code>git commit -m</code> " <code>message</code> "	Commit the staged snapshot, but instead of launching a text editor, use <code>&lt;message&gt;</code> as the commit message.
<code>git status</code>	List which files are staged, unstaged, and untracked.
<code>git log</code>	Display the entire commit history using the default format. For customization see additional options.
<code>git diff</code>	Show unstaged changes between your index and working directory.

## UNDOING CHANGES

<code>git revert</code> <code>&lt;commit&gt;</code>	Create new commit that undoes all of the changes made in <code>&lt;commit&gt;</code> , then apply it to the current branch.
<code>git reset &lt;file&gt;</code>	Remove <code>&lt;file&gt;</code> from the staging area, but leave the working directory unchanged. This unstages a file without overwriting any changes.
<code>git clean -n</code>	Shows which files would be removed from working directory. Use the <code>-f</code> flag in place of the <code>-n</code> flag to execute the clean.

## MANIPULATING GIT HISTORY

<code>git commit --amend</code>	Replace the last commit with the staged changes and last commit combined. Use with nothing staged to edit the last commit's message.
<code>git rebase &lt;base&gt;</code>	Rebase the current branch onto <code>&lt;base&gt;</code> . <code>&lt;base&gt;</code> can be a commit ID, branch name, a tag, or a relative reference to HEAD.
<code>git reflog</code>	Show a log of changes to the local repository's HEAD. Add <code>--relative-date</code> flag to show date info or <code>--all</code> to show all refs.

## GIT BRANCHES

<code>git branch</code>	List all of the branches in your repo. Add a <code>&lt;branch&gt;</code> argument to create a new branch with the name <code>&lt;branch&gt;</code> .
<code>git checkout -b</code> <code>&lt;branch&gt;</code>	Create and check out a new branch named <code>&lt;branch&gt;</code> . Drop the <code>-b</code> flag to checkout an existing branch.
<code>git merge &lt;branch&gt;</code>	Merge <code>&lt;branch&gt;</code> into the current branch.

## REMOTE REPOSITORIES

<code>git remote add</code> <code>&lt;name&gt; &lt;url&gt;</code>	Create a new connection to a remote repo. After adding a remote, you can use <code>&lt;name&gt;</code> as a shortcut for <code>&lt;url&gt;</code> in other commands.
<code>git fetch</code> <code>&lt;remote&gt; &lt;branch&gt;</code>	Fetches a specific <code>&lt;branch&gt;</code> , from the repo. Leave off <code>&lt;branch&gt;</code> to fetch all remote refs.
<code>git pull &lt;remote&gt;</code>	Fetch the specified remote's copy of current branch and immediately merge it into the local copy.
<code>git push</code> <code>&lt;remote&gt; &lt;branch&gt;</code>	Push the branch to <code>&lt;remote&gt;</code> , along with necessary commits and objects. Creates named branch in the remote repo if it doesn't exist.

# Additional Options +

## GIT CONFIG

<code>git config --global user.name &lt;name&gt;</code>	Define the author name to be used for all commits by the current user.
<code>git config --global user.email &lt;email&gt;</code>	Define the author email to be used for all commits by the current user.
<code>git config --global alias.&lt;alias-name&gt; &lt;git-command&gt;</code>	Create shortcut for a Git command. E.g. <code>alias.np 'git log --graph --oneline'</code> will set "git log" equivalent to " <code>git log --graph --oneline</code> ".
<code>git config --system core.editor &lt;editor&gt;</code>	Set text editor used by commands for all users on this machine. <code>&lt;editor&gt;</code> arg should be the command that launches the editor (e.g. <code>vim</code> ).
<code>git config --global --edit</code>	Open the global configuration file in a text editor for manual editing.

## GIT LOG

<code>git log -&lt;limit&gt;</code>	Limit number of commits to show. <code>&lt;limit&gt;</code> can be a number or keyword. E.g. " <code>git log -5</code> " will limit to 5 commits.
<code>git log --oneline</code>	Condense each commit to a single line.
<code>git log -p</code>	Display the full diff of each commit.
<code>git log --stat</code>	Include which files were altered and the relative number of lines that were added or deleted from each of them.
<code>git log --author="&lt;pattern&gt;"</code>	Search for commits by a particular author.
<code>git log --grep="&lt;pattern&gt;"</code>	Search for commits with a commit message that matches <code>&lt;pattern&gt;</code> .
<code>git log &lt;since&gt;..&lt;until&gt;</code>	Show commits that occur between <code>&lt;since&gt;</code> and <code>&lt;until&gt;</code> . Args can be a commit ID, branch name, HEAD, or any other kind of revision reference.
<code>git log -- &lt;file&gt;</code>	Only display commits that have the specified file.
<code>git log --graph --decorate</code>	<code>--graph</code> flag draws a text based graph of commits on left side of commit msgs. <code>--decorate</code> adds names of branches or tags of commits shown.

## GIT DIFF

<code>git diff HEAD</code>	Show difference between working directory and last commit.
<code>git diff --cached</code>	Show difference between staged changes and last commit.
<code>git reset</code>	Reset staging area to match most recent commit, but leave the working directory unchanged.
<code>git reset --hard</code>	Reset staging area and working directory to match most recent commit and <b>overwrites all changes</b> in the working directory.
<code>git reset &lt;commit&gt;</code>	Move the current branch tip backward to <code>&lt;commit&gt;</code> , reset the staging area to match, but leave the working directory alone.
<code>git reset --hard &lt;commit&gt;</code>	Same as previous, but resets both the staging area & working directory to match. <b>Deletes</b> uncommitted changes, and <b>all commits after</b> <code>&lt;commit&gt;</code> .

## GIT REBASE

<code>git rebase -i &lt;base&gt;</code>	Interactively rebase current branch onto <code>&lt;base&gt;</code> . Launches editor to enter commands for how each commit will be transferred to the new base.
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## GIT PULL

<code>git pull --rebase &lt;remote&gt;</code>	Fetch the remote's copy of current branch and rebases it into the local copy. Uses git rebase instead of merge to integrate the branches.
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## GIT PUSH

<code>git push &lt;remote&gt; --force</code>	Forces the git push even if it results in a non-fast-forward merge. Do not use the <code>--force</code> flag unless you're absolutely sure you know what you're doing.
<code>git push &lt;remote&gt; --all</code>	Push all of your local branches to the specified remote.
<code>git push &lt;remote&gt; --tags</code>	Tags aren't automatically pushed when you push a branch or use the <code>--all</code> flag. The <code>--tags</code> flag sends all of your local tags to the remote repo.