**Git Logging and Auditing**

**1**  
You want to print out the changes committed to your repository, and you need to display commit names and email addresses to real names and email addresses if known. When using 'git log', which option will produce the commits with that information?

A---user –email

B. -v user -v email

C. --use-mailmap

D. --include user,email

2

Which command will display the one per line history of the commits to the repository? (Choose all that apply)

1. git history –oneline
2. git log --pretty=oneline --abbrev-commit
3. git log –single
4. git log –oneline

**3**

You have been auditing your repository over the last few days of activity (which happened to be a weekend). In order to get a sense of the kind of work that was done, you want to view just the last 10 commits made to the repository. Which command would produce the desired result?

A git log --limit=10

B. git log -10

C. git review --number=10

D. git-log --limit 10

4

What command will display an ascii graph of the git repository's history?

1. git log –ascii
2. git --graphB. git –graph
3. git log –graph
4. git log –pretty

5

What command will allow you to specify a format for the git log output?

1. git log –format
2. git log --pretty=format
3. git format –pretty
4. git --format=log

**Git Basics**

1.

After you have initialized an empty repository on a local system, what location and file would you edit if you then wanted to name the repository after the fact?

A. [path to repository]/.git/description

B. [path to repository]/.git/info

C. [path to repository]/.git/HEAD

D. [path to repository]/.git/branches

### 2.

If there is a system global configuration variable for Git called 'user.name' already set on the local system, which of the following locations would contain that configuration?

1. /root/.git/config
2. ./.gitconfig
3. ~/.gitconfig
4. /etc/gitconfig

### 3.

Once a repository is created on the command line, the user can begin creating files. Which of the following commands will allow you to check-in all new files created in a directory that end with the extension .java?

1. git check-sum \*.java

B. git commit \*.java

C. git add \*.java

D. git scan \*.java

### 4.

When committing staged files in a repository, which of the following commands will allow you to commit those files while adding a comment for the entire commit at the same time?

1. git status -m "These are the files I am checking into the repository"
2. git commit -m "These are the files I am checking into the repository"

C. git add -comment "These are the files I am checking into the repository"

D. git local-commit -m "These are the files I am checking into the repository"

5 Fill in the blank: Everything in Git is **\_\_\_\_** before it is stored in the repository.

1. backed up
2. check-summed (via a hash value)
3. scanned
4. compressed

**6**

The /etc/gitconfig file containing global configuration options, would look like which of the following in a structure defining the default Git username?

1. username=user
2. user.name=user
3. username:user
4. [user] name = user

### 7.

If you routinely place files within a configured repository directory of a specific type (for example, any file with a \*.bkup extension), which file can you place the matching pattern within so that Git will never commit those files to the repository?

1. /etc/gitignore

B. /var/git/ignore

C. ~/.gitignore

D. [repo path]/.gitignore

Which of the following commands will initialize a local, empty repository, in the current directory?

1. init git-repo

B. git-config init

C. git init

D. git --install local

**Tags,Branching,Merging and Reverting**

### 1.

When working with branches in your repository, what is the name of the primary default branch in any configuration?

1. HEAD
2. Main
3. repo

D. master

### 2.

You have checked out v1.9 of the company's API in the local repository. You believe you have spotted an issue, but you do not want to affect the main code path since it has continued on past this point. If you need to make changes, test, and then save your code without affecting the main branch, what could you do to preserve the integrity of the current code path while still preserving your changes for testing?

1. **Once you have checked out the tag v1.9, any changes you make would need to be saved into a branch so that the master branch is not affected by changes in the past committed to the repository.**

B. Clone the local repository to an online repository (Github for example). You can then make changes locally and create a pull request for the maintainer to merge them.

C. Clone the repository to another location on the system. You can then check out the v1.9 tag and work on the master branch without affecting the current codebase. You can work on merging the changes in later.

D. Fork the repository to another location and begin your work at that point to fix the issues you have come across.

What is the BEST method to integrate changes from multiple branches into the master branch?

1. Rebasing
2. Tagging
3. Merging
4. Committing

### 4.

If you want to create a new branch from the point your local repository is at currently, in the simplest form, called 'experiment', which of the following commands would create the branch AND immediately switch to it?

1. git branch --checkout experiment

B. git tag -b -checkout experiment

***C. git checkout -b experiment***

D. git branch experiment

### 5.

Your team has completed work and testing on a branch of your API project called 'experiment' in your repository. Your organization has decided to move that work into the master branch of the codebase and integrate its functionality. What process will accomplish that goal?

1. Tagging

B. Checkout

C. Branching

D. Merging

### 6.

You have been asked to audit the v1.9 release of your company API in a repository. Within that repository at the command line, which of the following commands would allow you to view the versions of the files that particular version tag is pointing to?

1. None of the above.

B. git branch tag 1.9

C. git checkout --tag 1.9

1. D. git checkout 1.9

### 7.

When working on a specific branch, you want to 'note' a specific point (a major milestone or feature or version). Which feature of Git might you use to create a note in your repository so that the repository state is easily found at some future point?

1. Notation
2. Branching
3. Tagging
4. Committing with Comments

### 8.

When creating a tag within your repository, annotating the tag during creation will store what additional information along with the annotation in the database? (Choose all that apply)

1. Checksum.

B. Date of the Tag

C. Username of the Person Tagging.

D. The Password of the User.

# Cloning Git Repositories

### 1.

Which command would create a copy of a remote repository on your local system?

A. git clone <https://git.example.com/repository/project.git>

B. git remote <https://git.example.com/repository/project.git>

C. git add <https://git.example.com/repository/project.git>

D. git download <https://git.example.com/repository/project.git>

### 2.

Which are the most commonly used protocols for cloning a project from a remote repository? (Choose all that apply)

1. https://

B. rsync

C. ftp://

D. git://

### 3.

What are some common reasons to fork a git project? (Choose all that apply)

1. To use a fork as a basis for a new project.
2. To delete the original project so that no one else would need to contribute to it anymore.
3. To fix an issue outside of the main project with the intent to have it merged into the original project later.
4. To remove the original project from public view.

### 4.

Which of the following is a good reason for cloning a local repository that is itself a clone of a remote repository?

1. The development group may want to base a completely new project on a point in time from the remote repository as an experiment and have little confidence in future integration. This will keep unnecessary branches or tags from master visible outside of the 'repository of record'.
2. You have to clone the repository each time a team is going to work on code. You then link the two repositories (local and remote) and push changes to the local copy, which is then pushed to the remote master.
3. Removing a particular point in a time build is a good way to fork a project without having to use branches to confuse things later.
4. Cloning a local copy of a remote repository is not possible as it will be locked and linked only to the remote repository.

### 5.

What command(s) would create a copy of a local repository on your system? (Choose all that apply)

A. git clone --local /some/local/repo /new/local/repo

B. git copy --local /some/local/repo /new/local/repo

C. git clone /some/local/repo /new/local/repo

1. git copy /some/local/repo /new/local/repo

### Push, Pull, and Tracking Remote Repositories

### 1.

Which command will show you the remote repository that you are tracking, along with its URL(s)?

1. git remote
2. git remote –v
3. git track –u
4. git remote show

### 2.

Which command will download changes from a remote repository and attempt to merge them into the local repository?

1. git clone
2. git fetch
3. git download
4. git pull

### 3.

Which command sends changes from a local repository to a remote repository?

1. git remote

B. git push

C. git send

D. git clone

### 4.

(Fill In the Blank): Pull requests are designed to be initiated by the **and completed by the**.

1. —initiated by the GIT CLIENT and completed by the GIT CLIENT.
2. —initiated by the GIT CLIENT and completed by the REPOSITORY ADMINISTRATOR.

C. —initiated by the LOCAL GIT ADMIN and completed by the CRON JOB AT NIGHT.

D. —initiated by the REPOSITORY ADMINISTRATOR and completed by the GIT CLIENT.

### 5.

Which CLI command could be used on a git server to fork a project?

1. git merge
2. git clone
3. git fork

D. git copy