准备开始

git 最新版本为2.13.3（20170717）
git --version 查看当前git版本
切换到工作目录 `cd /d/Asheng_IDE/Go_Git`

About Git

offical site: https://git-scm.com/

Installing Git on Windows

1. https://git-for-windows.github.io/
2. https://git-scm.com/download/win
3. http://windows.github.com

First-Time Git Setup

Git中的配置分三种层级：全用户、当前用户、当前项目。
对应的命令分别如下：

```
git config --system
git config --global
git config
```

初次安装使用Git需要设置的配置文件如下：
设置个人信息

```
git config --global user.name "Asheng"
git config --global user.email xys4k@qq.com
```

重复设置即为修改。最后的设置信息去掉，即为读取当前设置。

设置默认编辑器
设置winodws下git默认编辑器方法如下。
git config --global core.editor "'C:/Program Files/Notepad++/notepad++.exe' -multiInst -notabbar -nosession -noPlugin"

读取Git配置信息

git config --list（列出所有配置信息）
git config --list --global
git config --list --system
git config user.name

查看帮助

三种查看帮助方法。

```
git help <verb>
git <verb> --help
man git-<verb>
```

For example:

```
git help config
```

Git Basics

Getting a Git Repository

可以把一个空文件夹初始化为Git仓库，也可以克隆一个已经存在的Git仓库。

If you're starting to track an existing project in Git, you need to go to the project's directory and type

```
git init
```

This creates a new subdirectory named .git that contains all your necessary repository files—a Git repository skeleton.

Cloning an Existing Repository

```
git clone https://github.com/libgit2/libgit2
```

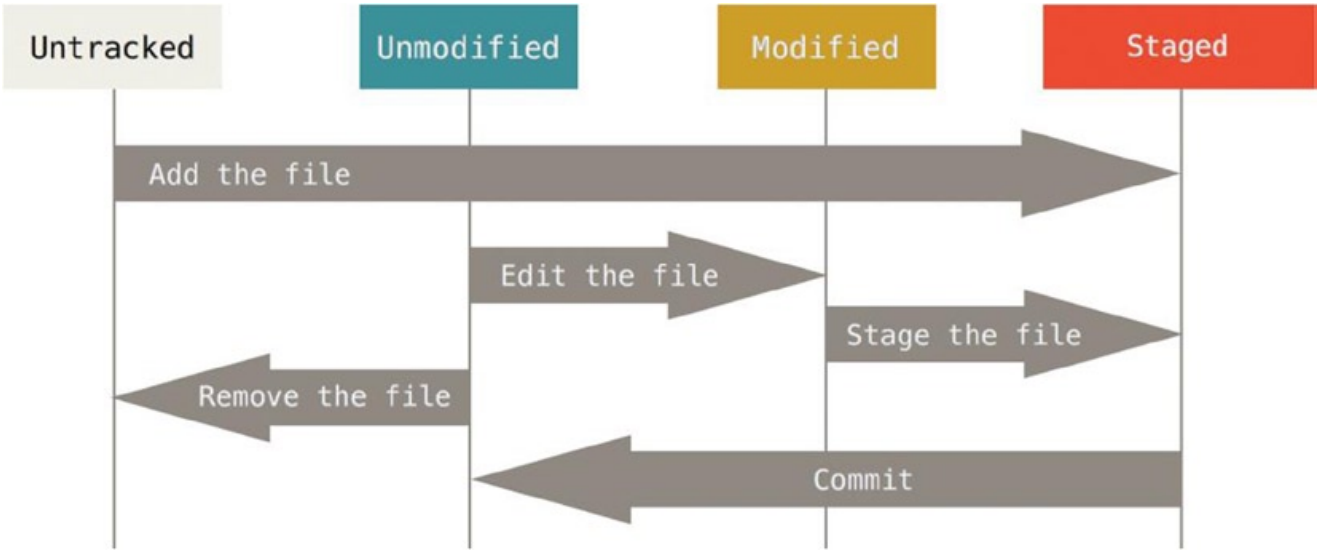
That creates a directory named libgit2, initializes a .git directory inside it.

```
git clone https://github.com/libgit2/libgit2 mylibgit
```

That command does the same thing as the previous one, but the target directory is called mylibgit.

Recording Changes to the Repository

The lifecycle of the status of your files.



Checking the Status of Your Files

```
echo 'My Project' > README
git status
git status -s （查看简化版的状态）
```

运行上述命令将能看到README文件未被Git追踪。

Tracking New Files

```
git add filename
git add directory
git status
```

Staging Modified Files

It may be helpful to think of `git add` more as “add this content to the next commit” rather than “add this file to the project”.

举例说明一个文件在Git中的各种状态
有一个git目录名为test，直接在该目录新建文件`720.txt`，则该文件的状态为`Untracked files`。
然后执行`git add 720.txt`，则该文件的状态变为`Changes to be committed:`。
再执行`git commit 720.txt`，则该文件已被提交完毕。
再执行`notepad 720.txt`，对该文件进行任意的编辑，则文件的状态为`Changes not staged for commit:`。
再执行`git add 720.txt`，则该文件的状态变为`Changes to be committed:`。
如果此时再执行`notepad 720.txt`，则该文件同时有两个状态`Changes to be committed:`和`Changes not staged for commit:`。

忽略文件

```
Here is another example .gitignore file:
# a comment - this is ignored
*.a # no .a files
!lib.a # but do track lib.a, even though you're ignoring .a files above
/TODO # only ignore the root TODO file, not subdir/TODO
build/ # ignore all files in the build/ directory
doc/*.txt # ignore doc/notes.txt, but not doc/server/arch.txt
跟多忽略规则参考： https://github.com/github/gitignore
```

Viewing Your Staged and Unstaged Changes

To see what you've changed but not yet staged, type `git diff` with no other arguments.

If you want to see what you've staged that will go into your next commit,
you can use `git diff --staged`. This command compares your staged changes to your last commit.

Committing Your Changes

git commit 把stage area中的文件全部提交。

Skipping the Staging Area

git commit -a -m 'added new benchmarks'
直接把所有已经追踪的文件提交版本。

Viewing the Commit History

git log
git log --pretty=oneline (简化显示)

Working with Remotes

查看当前已经连接到的远程仓库，如果该仓库本身就是克隆自远程仓库，则Git会自动连接到该仓库。
origin是远程仓库的默认简短名称。
git remote
git remote -v

添加远程仓库
git remote add pb https://github.com/paulboone/ticgit (pb既是该仓库在git中的简短名称)
git remote -v

Fetching and Pulling from Your Remotes

get data from your remote projects, you can run:

```
git fetch [remote-name]
git fetch origin
```

Pushing to Your Remotes

When you have your project at a point that you want to share, you have to push it upstream.

```
git push [remote-name] [branch-name]
git push origin master (push your master branch to your origin server)
```

Inspecting a Remote

git remote show origin