

HW6Solution

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Problem

1.Git Basics

(1)(2) basics and fork

```
1  git status
2  git add <file>
3  git commit
4  git cat-file -p SHA-1
5
6  git config --global user.name "TerenceStark"
7  git config --global user.email "xiashulang@gmail.com"
8
9  git diff <hash> hello.txt
10
11 git clone https://hub.fastgit.org/pcottle/learnGitBranching.git
```

```
→ gitDemo git init
Initialized empty Git repository in /home/terence/Desktop/gitDemo/.git/
→ gitDemo git:(master)
→ gitDemo git:(master) ls .git
branches  config  description  HEAD  hooks  info  objects  refs
→ gitDemo git:(master)
```

```
→ gitDemo git:(master) git cat-file -p 3c00cf2
tree aaa96ced2d9a1c8e72c56b253a0e2fe78393feb7
author TerenceStark <xiashulang@gmail.com> 1626941507 +0800
committer TerenceStark <xiashulang@gmail.com> 1626941507 +0800

Add hello.txt
→ gitDemo git:(master) git cat-file -p aaa96ced2d9a1c8e72c56b253a0e2fe78393feb7
100644 blob ce013625030ba8dba906f756967f9e9ca394464a    hello.txt
```

```
* commit d86ec62d0f046fb3b5c5d8ae5424a22fb479d360 (HEAD, master)
| Author: TerenceStark <xiashulang@gmail.com>
| Date:   Thu Jul 22 17:56:22 2021 +0800
|
|     add Terence
|
* commit 3c00cf23606bd310e5ae8ca2815e9290b7ac0e7a
  Author: TerenceStark <xiashulang@gmail.com>
  Date:   Thu Jul 22 16:11:47 2021 +0800

      Add hello.txt
```

(3) git graph

```
1 | git log --all --graph --decorate #查看所有分支图形化的commit历史
```

```
commit b7ac2851c6fbd5a878f3db6acb84b4c5f67d9a32
Author: Anh H[ong] <hong4rc@gmail.com>
Date:   Mon Apr 19 09:51:20 2021 +0700

    refactor: replace all master to main
```

(4)(5)

```
1 | git log README.md
2 | git blame _config.yml | grep collections
3 | git show a88b4eac
```

2.Git Exercise

(1) git stash

```
1 | git status
2 | git stash
3 | #git stash 会把所有未提交的修改（包括暂存的和非暂存的）都保存起来，用于后续恢复当前工作目录。
4 | #比如下面的中间状态，通过 git stash 命令推送一个新的储藏，当前的工作目录就干净了。
5 | #stash是本地的，不会通过 git push 命令上传到 git server 上。
```

```
→ learnGitBranching git:(main) x git status
# On branch main
# Changes not staged for commit:
#   (use "git add <file>..." to update what will be committed)
#   (use "git checkout -- <file>..." to discard changes in working directory)
#
#       modified:   README.md
#
no changes added to commit (use "git add" and/or "git commit -a")
→ learnGitBranching git:(main) x git stash
Saved working directory and index state WIP on main: 08a6f0e Merge pull request #861 from peppelauro/patch-1
HEAD is now at 08a6f0e Merge pull request #861 from peppelauro/patch-1
```

```
1 | git log -all -oneline #查看所有分支的commit历史,online 一条提交信息用一行展示
```

```
ab50391 WIP on main: 08a6f0e Merge pull request #861 from peppelauro/patch-1
5574cc9 index on main: 08a6f0e Merge pull request #861 from peppelauro/patch-1
f6fc36e rebuild for prod
fb1a7b1 merge main
08a6f0e Merge pull request #861 from peppelauro/patch-1
7136e6c rebuild for prod
29df807 merge main
4f0bd98 Merge pull request #860 from mandudul23/main
55aab57 Update merging.js
a5192c6 Add bottom menu "zh_TW" translation
bb06f63 rebuild for prod
```

```
1 git status
2 git stash pop #可以通过git stash pop命令恢复之前缓存的工作目录
3 git stash list #查看现有stash
4 git stash drop #移除stash
5 git stash show -p #查看指定stash的diff
```

```
→ learnGitBranching git:(main) git stash pop
# On branch main
# Changes not staged for commit:
#   (use "git add <file>..." to update what will be committed)
#   (use "git checkout -- <file>..." to discard changes in working directory)
#
#       modified:   README.md
#
no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (ab50391d575d1d68ae5a03e78fde094938ef288c)
learnGitBranching git:(main) ↵
```

(2)(3) dotfile

```
1 [alias]
2   co = checkout
3   ci = commit
4   st = status
5   br = branch
6   hist = log --pretty=format:@"%h %ad | %s%d [%an]" --graph --date=short
7   type = cat-file -t
8   dump = cat-file -p
9   graph = log --all --graph --decorate --oneline
10
11 git config --global core.excludesfile ~/.gitignore .DS_Store
```