

Comprehension Check: Git and GitHub

Question 1

1/1 point (graded)

Which statement describes reasons why we recommend using git and Github when working on data analysis projects?

- ☐ Git and Github facilitate fast, high-throughput analysis of large data sets.
- ☒ Git and Github allow easy version control, collaboration, and resource sharing. ✓
- ☐ Git and Github have graphical interfaces that make it easy to learn to code in R.
- ☐ Git and Github is good for long-term storage of private data.

Answer

Correct:

Git and Github help you keep track of changes made to your code by you and your collaborators. Github is a good place to store code that you want to share with others in your field.

Explanation

Git and Github help you keep track of changes made to your code by you and your collaborators. Github is a good place to store code that you want to share with others in your field.

Submit

You have used 1 of 2 attempts

i Answers are displayed within the problem

Question 2

1/1 point (graded)

Select the steps necessary to:

1. Create a directory called "project-clone",



2. Clone the contents of a git repo at the following URL into that directory (https://github.com/user123/repo123.git), and

3. List the contents of the cloned repo.



```
mkdir project-clone
git add https://github.com/user123/repo123.git
ls
```



```
mkdir project-clone
git clone https://github.com/user123/repo123.git
ls
```



```
mkdir project-clone
cd project-clone
git clone https://github.com/user123/repo123.git
ls
```



```
mkdir project-clone
cd project-clone
git clone https://github.com/user123/repo123.git
less
```

Answer

Correct:

You need to make the directory, move into the new directory, clone the repo, and use `ls` to list the contents of the cloned repo.

Explanation

You need to make the directory, move into the new directory, clone the repo, and use `ls` to list the contents of the cloned repo.

Submit

You have used 1 of 2 attempts



Answers are displayed within the problem



Question 3

1/1 point (graded)

You have successfully cloned a GitHub repository onto your local system. The cloned repository contains a file called "heights.txt" that lists the heights of students in a class. One student was missing from the dataset, so you add that student's height using the following command:

```
echo "165" >> heights.txt
```

Next you enter the command `git status` to check the status of the Github repository.

What message is returned and what does it mean?



`modified: heights.txt, no changes added to commit`

This message means that the heights.txt file was modified, but the changes have not been staged or committed to the local repository. ✓



`modified: heights.txt, no changes added to commit`

This message means that the heights.txt file was modified and staged, but not yet committed.



`1 file changed`

This message means that the heights.txt file was modified, staged, committed, and pushed to the upstream repository.



`modified: heights.txt`

This message means that the heights.txt file was modified, staged, and committed.

Answer

Correct:

The file has been modified in the local directory, but none of the changes have been prepared to be included in the remote repository.

Explanation

The file has been modified in the local directory, but none of the changes have been prepared to be included in the remote repository.

Submit

You have used 1 of 2 attempts



Question 4

1/1 point (graded)

You cloned your own repository and modified a file within it on your local system. Next, you executed the following series of commands to include the modified file in the upstream repository, but it didn't work. Here is the code you typed:

```
git add modified_file.txt
git commit -m "minor changes to file" modified_file.txt
git pull
```

What is preventing the modified file from being added to the upstream repository?

☐ The wrong option is being used to add a descriptive message to the commit.

☒ `git push` should be used instead of `git pull`. ✓

☐ `git commit` should come before `git add`.

☐ The `git pull` command line needs to include the file name.

Answer

Correct:

To include local changes in the remote repository, you use `git push` to "push" the changes from your computer to the remote location.

Explanation

To include local changes in the remote repository, you use `git push` to "push" the changes from your computer to the remote location.

Submit

You have used 1 of 2 attempts

Question 5

1/1 point (graded)



You have a directory of scripts and data files on your computer that you want to share with collaborators using GitHub. You create a new repository on your GitHub account called "repo123" that has the following URL: <https://github.com/user123/repo123.git>.

Which of the following sequences of commands will convert the directory on your computer to a GitHub directory and create and add a descriptive "read me" file to the new repository?



```
git init
git add README.txt
git commit -m "First commit. Adding README file."
git remote add origin `https://github.com/user123/repo123.git`
git push
```



```
echo "A new repository with my scripts and data" > README.txt
git init
git add
git commit -m "First commit. Adding README file."
git remote add origin `https://github.com/user123/repo123.git`
git push
```



```
echo "A new repository with my scripts and data" > README.txt
git init
git add README.txt
git commit -m "First commit. Adding README file."
git remote add origin `https://github.com/user123/repo123.git`
git pull
```



```
echo "A new repository with my scripts and data" > README.txt
git init
git add README.txt
git commit -m "First commit. Adding README file."
git remote add origin `https://github.com/user123/repo123.git`
git push
```



Answer

Correct:

You create the README.txt file, initialize the local directory, stage and commit the README.txt file, connect the local directory to the remote directory, then push the files from your computer to your remote Github repository.



Explanation

You create the README.txt file, initialize the local directory, stage and commit the README.txt file, connect the local directory to the remote directory, then push the files from your computer to your remote Github repository.

Submit

You have used 1 of 2 attempts

i Answers are displayed within the problem

Question 6

1/1 point (graded)

You have made a local change to a file in your R project, which is associated with a GitHub repository. You add your changes and push, but you receive a message:

Everything up-to-date

Which of the following commands did you forget to do?

☐ git pull

☐ git merge

☐ git add

☐ git fetch

☒ git commit ✓

☐ git push

☐ git rebase

Explanation

The workflow should be add-commit-push. If you push without committing, you will receive the message

Everything up-to-date .

Submit

You have used 1 of 2 attempts



Question 7

1/1 point (graded)

Suppose you previously cloned a repository with `git clone`. Running `git status` shows:

```
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
```

However, you know that there are some changes in the upstream repository.

How will you sync these changes with one command?

☐ git fetch

☒ git pull ✓

☐ git merge origin/master

☐ git merge upstream/master

☐ git push

Explanation

Git pull allows you to fetch and merge at the same time (fetch is to sync remote with local and merge is to sync local with working directory).

Submit

You have used 1 of 2 attempts

