**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.

correct

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.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**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

correct

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.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**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.

correct

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.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**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.

correct

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.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**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

correct

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.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**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

correct

You have used 2 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**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

correct

You have used 1 of 2 attempts