Module 6 MCQs

1. Choose all the protocols which Git supports.

a. Local

b. Remote

c. HTTP

d. Ssh

Answer - a, c, d

Explanation -

GIT supports local, HTTP and Ssh protocols.

Local - is often used if everyone on your team has access to a shared filesystem such as an NFS mount.

HTTP - anyone who can access the webserver under which you put the repository can also clone your repository using the HTTP protocol.

Ssh - SSH is also the only network-based protocol that you can easily read/write from/to.

2. You have created a new organization to start the new open-source project in GITHUB. You are the owner of this organization and have added 10 developers to this organization. You have created a hierarchy among the developers. Four lead developers need full administrative access, while the other six developers need user access. How will you grant different access to the developers? (Choose

all the correct answers)

a. Owner access to 4 lead developers

b. Editor access to 6 developers

c. Editor access to 4 lead developers

d. Member access to 6 developers

Answer - b, d

Explanation -

You can provide owner access to 4 lead developers because the owner has full administrative access to the entire organization. In comparison, you can provide member access to 6 developers as members can only see every team and member in the organization.

3. You are trying to push master branch changes into the remote repository, and at the same time, someone else from the team has pushed changes to the same branch. Due to this, you have encountered an error. Among the following options, which error are you getting?

a. 404

b. Access denied

c. Rejected

d. 500

Answer - c

Explanation -

In this scenario, changes which you are trying to push to the remote repository will be rejected. You will get the rejected message or error on your terminal because this means that your local GIT history and that on the GitHub remote are not compatible, i.e., they have diverged. You can use 'git pull' command to pull the latest code again to your local repository and then add your changes and run the GIT push command to commit your changes.

4. You have joined as a developer in a new organization where your team uses GIT for version control and collaboration. You have started contributing to the project. Which GIT operation you would invoke first?

a. update

b. checkout

c. revert

d. clone

Answer - d

Explanation -

You will first use the 'git clone' command to clone the current remote repository to your local repository so that your local repository will have the current project files.

5. A user needs to change where the HEAD pointer points and modify the working directory contents. Among the following options, which git command user should use to perform this task?

a. merge

b. checkout

c. pull

d. push

Answer - b

Explanation -

You can use the 'git checkout' command. This command checks the branches and updates the files in the working directory to match the version already available in that branch. It forwards the updates to Git to save all new commit in that branch.

6. You have created an organization in GITHUB and added a secret team to your organization. Can other teams in your organization have the visibility of secret team members?

a. True

b. False

Answer - b

Explanation -

Other teams and their members in your organization do not have the visibility of secret team members, as a secret team can only be seen by its members.

7. Which of the following tasks are achieved with the help of the 'git clone' command?

a. Commits a new branch

b. Creates a working repository

c. Creates a local copy of the repository

d. b and c

Answer - d

Explanation -

GIT clone is a Git command-line utility used to target an existing repository and create a clone or copy of the target repository. Thus you will have all the latest project files in your working directory.

8. A user wants to make radical changes in the teams' project and wants to make sure that his/her changes will not impact the rest of the team’s work. Where should the user implement these changes?

a. branch

b. trunk

c. tag

d. root

Answer - a

Explanation - User can push the changes in its branch; thus, no impact will be on other teams work as changes made by the user are stored in a different branch other than the master branch.

9. User is working with GIT and want to clone the GITHUB repository using SSH protocol. From the following options, select the correct sequence to complete the setup?

1. Clone GIT repository using SSH URL

2. Add public key in GITHUB account

3. Run ssh agent manually or on GIT Bash startup

4. Generate Key Pairs using ssh keygen

5. Add private key in ssh agent

a. 1-4-3-2-5

b. 4-1-5-3-2

c. 4-2-3-5-1

d. 4-3-2-5-1

Answer - c

Explanation -

Steps to clone GITHUB repository using SSH protocol:

1. Generate Key Pairs using ssh keygen

2. Add public key in GITHUB account

3. Run ssh agent manually or on GIT Bash startup

4. Add private key in ssh agent

5. Clone GIT repository using SSH URL

10. A User has a local repository, but other team members have pushed the changes into the remote repository. Among the following options, what GIT operation user should use to download those changes into his/her working directory?

a. update

b. pull

c. export

d. commit

Answer - b

Explanation -

Merging of remote upstream changes in your local repository is a common task in workflows of Git-based collaboration. The 'git pull' command is used to fetch and download content from a remote repository. It immediately updates the local repository to match the content. The 'git pull' command combines two other commands - ‘git fetch' and 'git merge'. First, 'git pull' will perform a git fetch that is scoped to the local branch that HEAD is pointed at. Once after downloading the content, git pull enters a merge workflow. In this a new merge commit will be created and HEAD will be updated to point at the new commit.