Git -hub Punnishment 11:45

HERE ARE 10 QUESTIONS OF RELATED GIT-HUB??

1. What is Git, How does it differ from other version control system?
2. What is purpose of “git add” command?
3. What is the difference between “git commit and git push”?
4. How do you create a new brand in Git
5. What is the purpose of Git branches?
6. How do you merge two branches in Git?
7. What is the purpose of a remote repository in Git?
8. How do use revert change Git?
9. How do you use Git to collaborate with others?
10. What is the difference between “git fetch”

Answer(1)

Git is a distributed version control system (DVCS) that tracks changes in computer files and directories. This means that each developer has a full copy of the repository, making it more resilient to failures and easier to work offline.

Unlike centralized version control systems (CVCS) like SVN, Git doesn't require a central server to store the repository. This distributed nature offers several advantages:

- **Speed:** Local operations are much faster.
- **Reliability:** No single point of failure.
- **Offline work:** Developers can work and commit changes without an internet connection.

Ans (2)

The git add command stages changes in your working directory for inclusion in the next commit. Think of it as preparing files to be saved.

Ans (3)

- **git commit:** Creates a new commit in your local repository, recording the staged changes.

- **git push:** Sends your local commits to a remote repository, making them accessible to others.

Ans (4)

To create a new branch, use:

Bash

```
git branch <branch-name>
```

Ans (5)

Branches in Git allow developers to work on different features or bug fixes independently without affecting the main codebase. It's a powerful tool for parallel development and experimentation.

Ans (6)

To merge one branch into another, first switch to the branch you want to merge into and then use:

```
git merge <branch-to-merge>
```

Ans (7)

A remote repository is a copy of your local repository hosted on a server, allowing you to collaborate with others and share your code.

Ans (8)

To revert a specific commit, use:

Bash

```
git revert <commit-hash>
```

Ans (9)

1. **Clone the remote repository:** `git clone <remote-url>`
2. **Make changes and commit:** `git add`, `git commit`
3. **Push changes to the remote:** `git push`
4. **Fetch and merge changes from others:** `git fetch`, `git merge`

Ans (10)

- **git fetch:** Downloads new commits from a remote repository without merging them into your local branch.
- **git pull:** Fetches new commits from a remote repository and automatically merges them into your current branch.