Git Mastery Checklist

1. Setup Git (user.name, user.email, autocrlf)
2. Initialize repo & first commit
3. Understand working dir, index, HEAD
4. Create .gitignore and use it
5. Create branches & switch between them
6. Merge branches (fast-forward & 3-way)
7. Resolve merge conflicts
8. Add a remote & push to GitHub
9. Pull & fetch updates
10. Use tracking branches
11. Undo changes with restore/reset/revert
12. Recover work with reflog
13. Rebase to update feature branches
14. Interactive rebase to squash commits
15. Stash changes and apply later
16. Cherry-pick commits
17. Tag commits and push tags
18. Use bisect to find faulty commit
19. Force push safely (--force-with-lease)
20. Recover deleted branches
21. Follow a branch naming convention
22. Write conventional commit messages
23. Use git log pretty formats
24. Configure useful git aliases
25. Understand merge vs rebase trade-offs
26. Know when to revert vs reset
27. Handle secrets in Git history
28. Use hooks (pre-commit, pre-push)
29. Collaborate via PR workflow
30. Keep history clean before merging