

- 1 - Git / GitHub
- 2 - Maxam
- 3 - Sonarqube / Junit
- 4 - Jenkins
- 5 - Docker → 32-40 Hrs
- 6 - K8S → 40-48 Hrs
- 7 - Terraform
- 8 - Ansible → 40-48 Hrs
- 9 - Prometheus
- 10 - Grafana

Breaks

15 mins Tea Breaks — 90 mins (10:00-10:15)

Lunch Break — 60 mins (12:30-1:30)

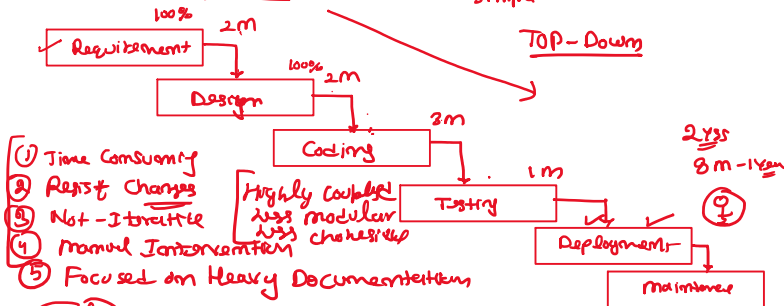
Online Based Quiz 4 quizzes 5 mins

Quiz

15-18 Labs (Demonstrated)

Traditional (Waterfall) SDLC — clear structure — simple

TOP-Down



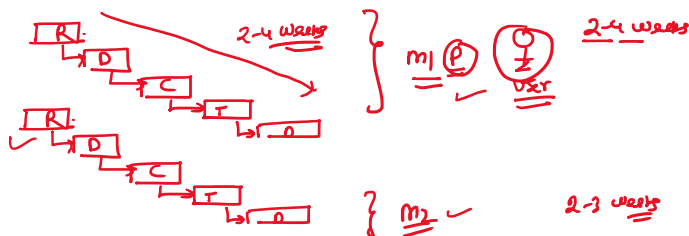
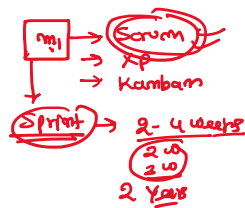
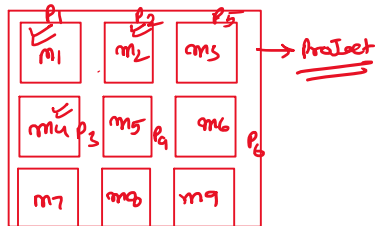
- 1 Time Consuming
- 2 Resist changes
- 3 Not-Iterative
- 4 Manual Intervention
- 5 Focused on Heavy Documentation

Agile

Waterfall → Focused on Documentation & Process

Agile → Working Product

↳ Modular (Iterative Model)



→  } m2 ✓ 2-3 weeks

Waterfall

✓
Success : Failure
20 : 80
80 : 20

Agile

+
DevOps → Culture + Tools
Automation

DevOps

-	Continuous Integration	+ <u>Agile</u>
-	Deployment	
-	Testing	
-	Monitoring	
-	Feedback	

Agile + DevOps

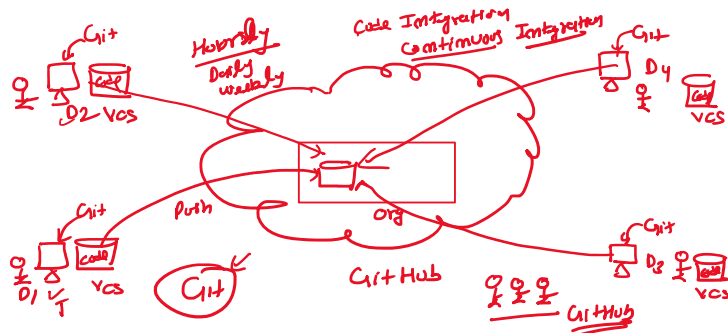
Modern Development Model

DevOps

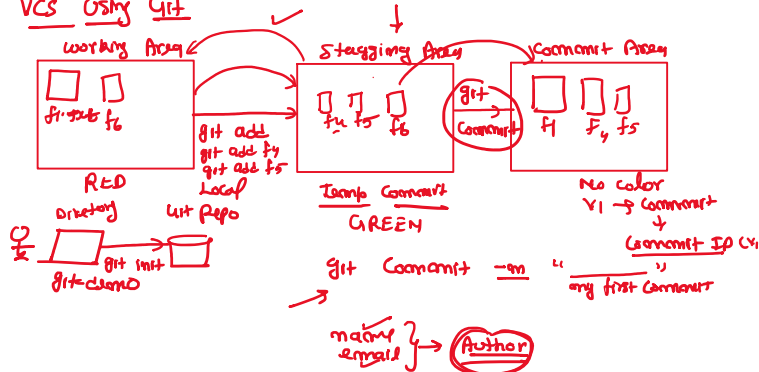
Git & GitHub (Continuous Integration)

- VCS
- Code Integration by multiple Developer

→ Git → Client Application (Install Dev m/c) → VCS
→ GitHub → Cloud Based Portal (Online Portal) → CI



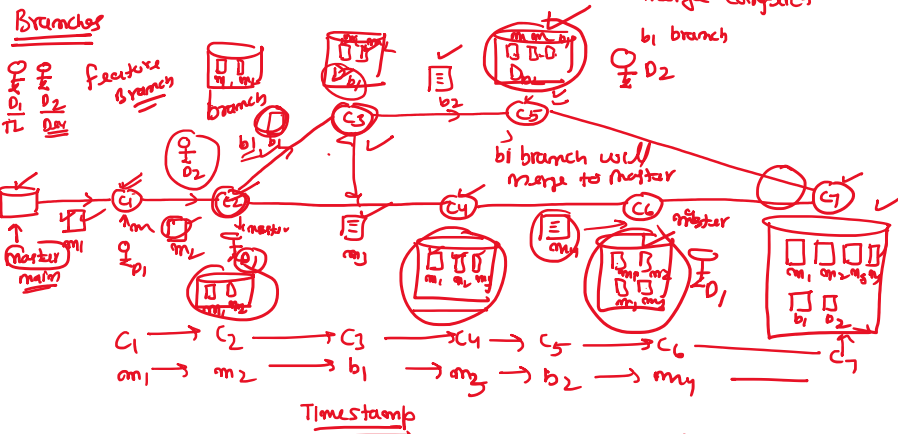
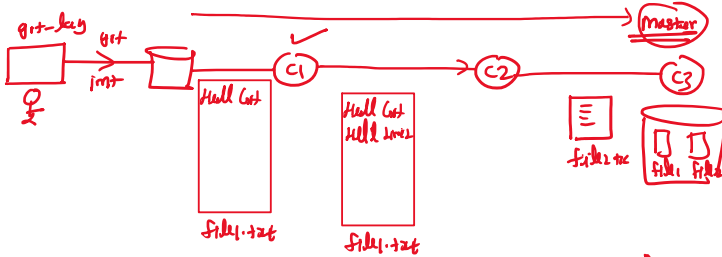
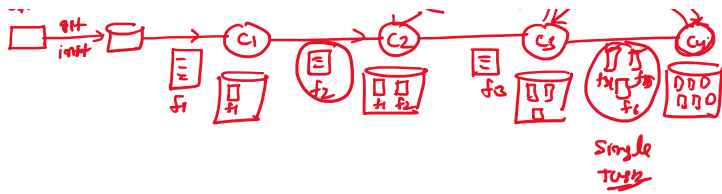
VCS Using Git



- Git init ✓
- git add ✓
- git commit ✓
- git log ✓
- git log --online

git status

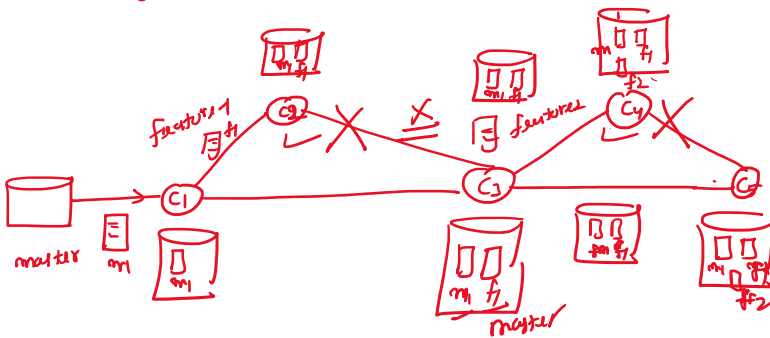




git branch b1 → Create a new Branch

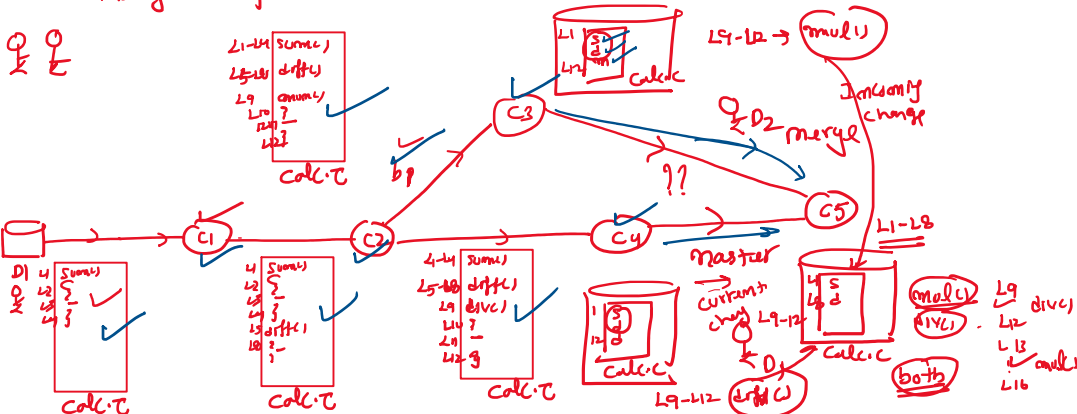
git checkout b1 → Switch the Branch

git checkout -b b1 → Create + Switch Branch



- merge Conflict
- Git Rebase
- Git Revert
- Git Reset

Merge Conflict (Branch) Resolve



merge Conflict → Resolve

Git Revert

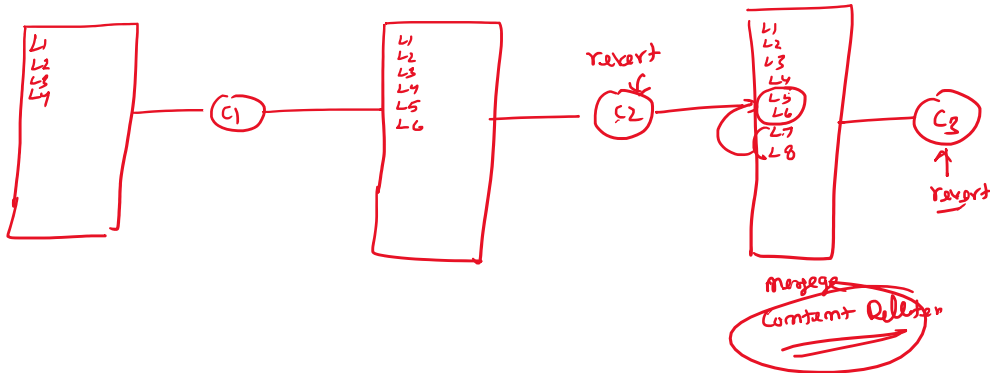
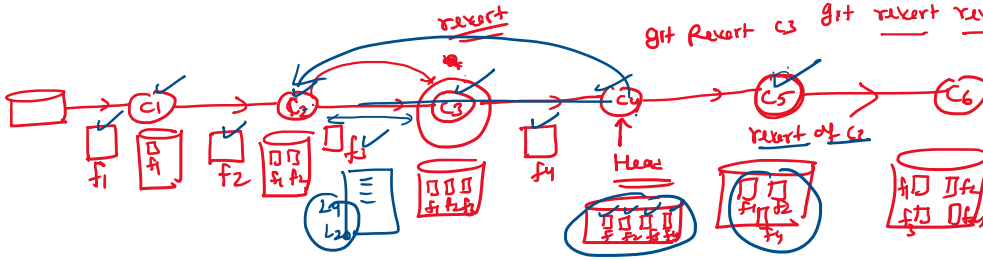
VCS (Non-Branch)



reapply

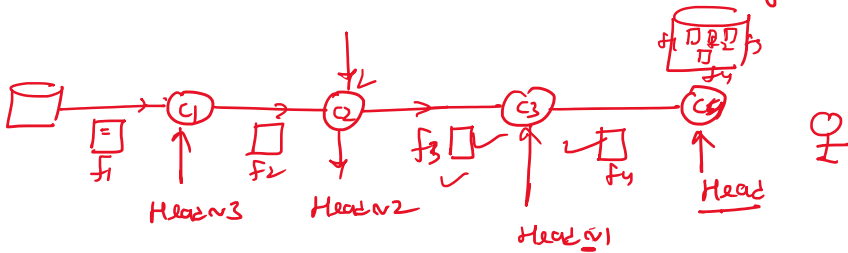
git revert C5

git revert C3 git revert revert C3

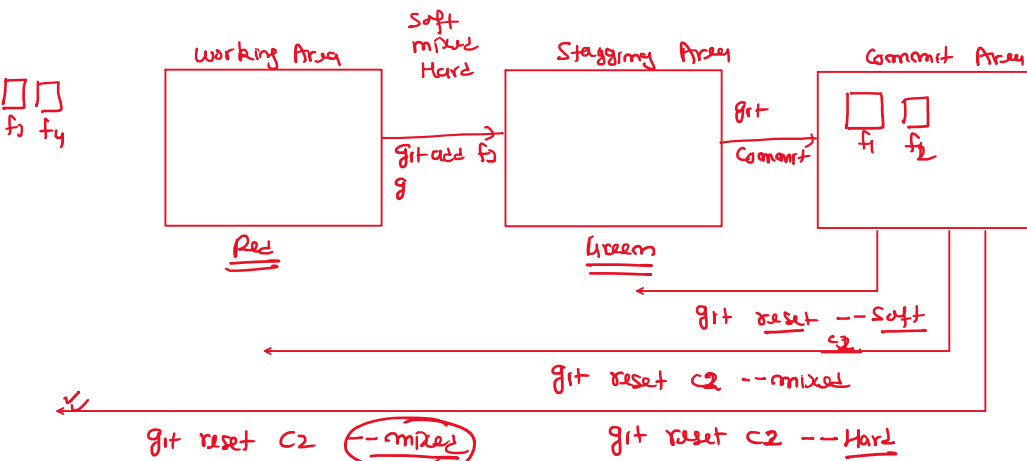


Git Reset

git reset C2 --Hard

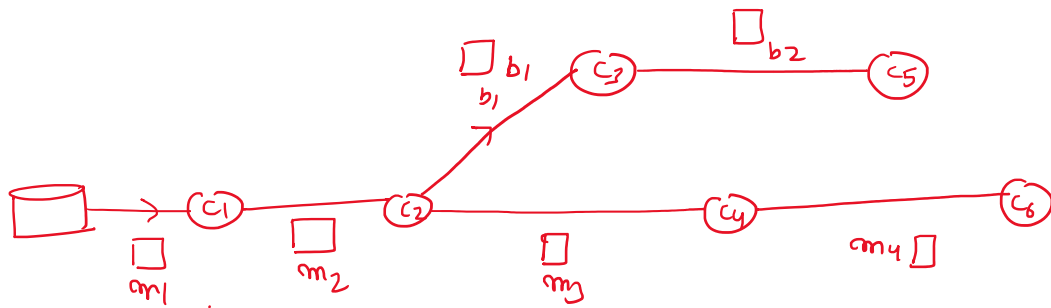


git reset Head v2 --Hard

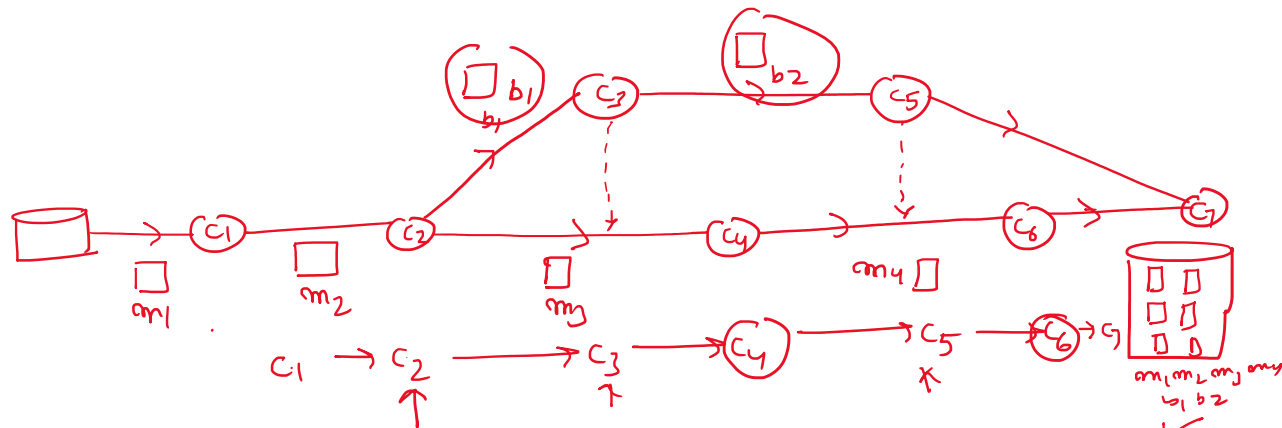


Git Merge > Branch
Git Rebase

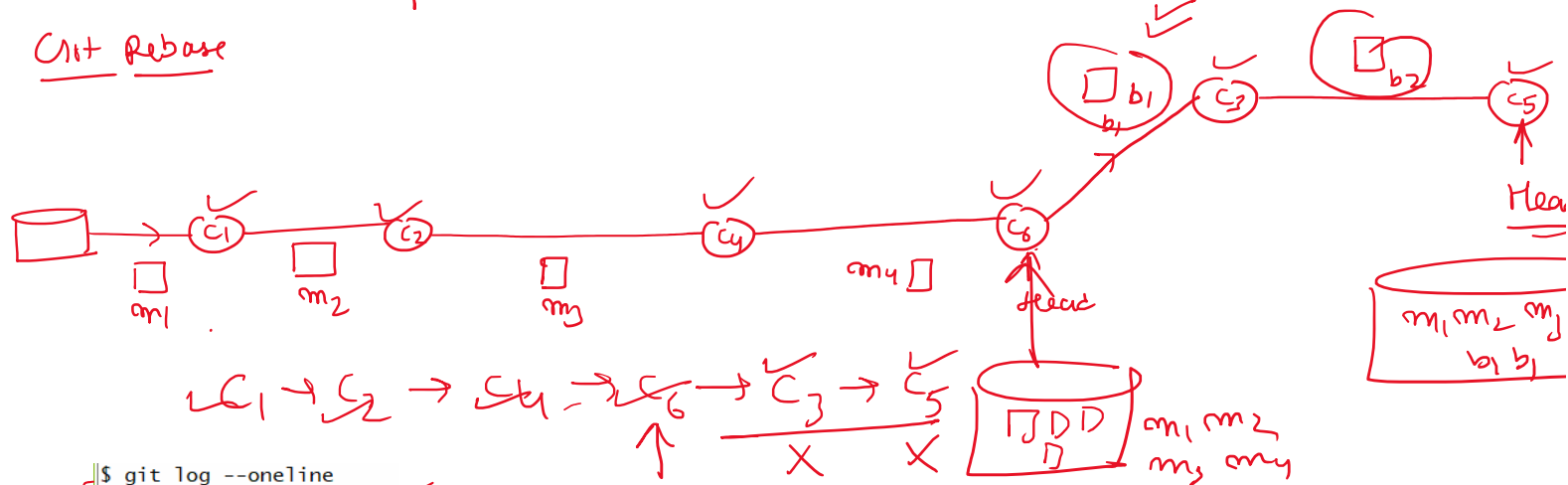




Git merge

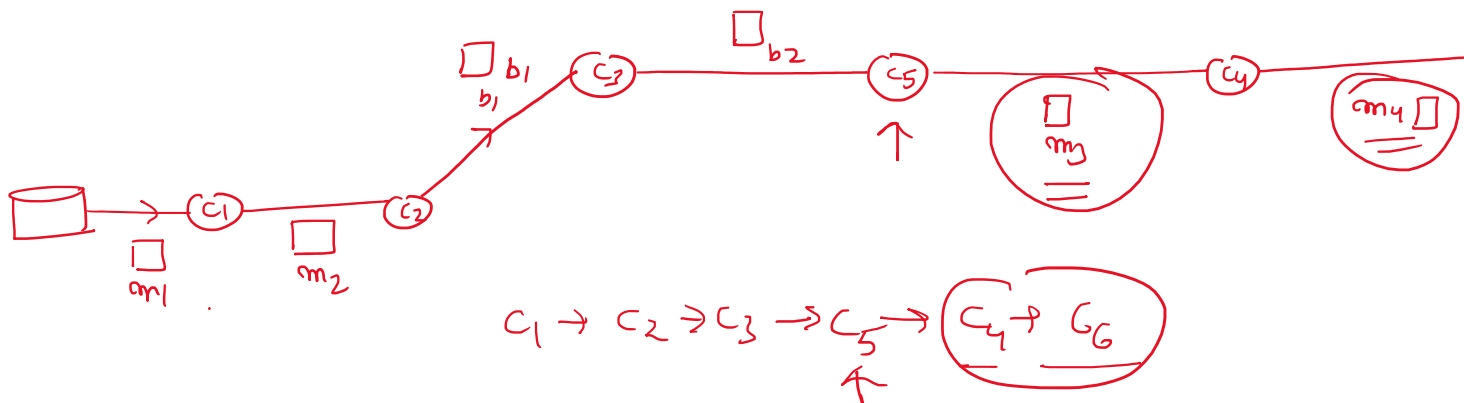


Git Rebase



```

$ git log --oneline
7442ec4 (HEAD -> b1) c5 ✓
9bf56e3 c3 ✓
0d72776 (master) c6 ✓
b4d69f8 c4 ✓
6984831 c2 ✓
bd82c2f c1 ✓
  
```



only

C_6

