

30538 git quiz

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Part 1 – git commands

You start with a repo that looks like this

```
% ls  
foo.txt  
  
% git log --oneline  
09ee4bb (HEAD -> master) my second commit  
a6e1b8a my first commit
```

Pretend in a branch named something other than master you modified `foo.txt`, went back to master, did some work in a third branch also modifying `foo.txt`, and then tried to merge the third branch into the second branch. Provide the git commands you ran.

Part 2 – conflict resolution

Unfortunately you got the dreaded merge conflict. Doh!

1. Write what a hypothetical `foo.txt` file would look like after you attempt this merge.
2. Then edit down `foo.txt` so the conflict is resolved.
3. Provide the git commands necessary to complete the merge.
4. Write out the sequence of commits from part 1 and part 2 (including your merge commit).
Unfortunately it is not possible to draw in canvas, but you can show a tree of commits in plaintext. For example, the history of commits C0 followed by C1 can be written as
`C0 <- C1`

Answers

Part 1

```
% git branch iss1
% git switch iss1
% echo "2" >> foo.txt
% git add foo.txt
% git commit -m "C3"
% git switch main
% git branch iss2
% git switch iss2
% echo "3" >> foo.txt
% git add foo.txt
% git commit -m "C4"
% git switch iss1
% git merge iss2 --no-ff
```

Part 2

1. Write what a hypothetical `foo.txt` file would look like after you attempt this merge.
2. Then edit down `foo.txt` so the conflict is resolved.
3. Provide the git commands necessary to complete the merge.
4. Write out the sequence of commits from part 1 and part 2 (including your merge commit). Unfortunately it is not possible to draw in canvas, but you can show a tree of commits in plaintext. For example, the history of commits C0 followed by C1 can be written as
`C0 <- C1`
5. `<<<<< HEAD`
`Hello from feature`
`=====`
`Hello from experiment`
`>>>>> iss2`
6. `Hello from feature`
7. `% git add foo.txt \\ git commit` (I think `git merge` might work too for the second command, the grader of this question should double check)

8. C1 <- C2 <- C3 <- C5
 \ C4 /