**Git**

1. Suppose you had a file, called first.md, and you made a copy of this file, named it second.md and made some changes to it. Next, suppose you ran diff -u first.md second.md.

Here is the content of the original first.md

A

B

C

D

E

F

Here is the output of the diff command:

Text

Description automatically generated with low confidenceWhat is the content of second.md?

Answer：  
The content of the second.md should be:  
A  
B  
$  
C  
#  
%  
E  
F

1. (True or False) If you accidentally add a file to the staging area, you can remove it using git reset. For example, if you accidentally add thrid.md, but don’t want it to be committed yet, run git reset thrid.md and the file will be removed from the staging area, **but it will still be in your working directory**.  
   Answer: True
2. (True or False) The commands git reset and git revert can only be used to undo commits in the git repository.  
   Answer: False. Git reset can also be used to modify the staging area and working directory (e.g. unstaging files in the staging area)
3. (True or False) The commands git checkout can be used to roll back to a certain commit hash (check the documentation if you are unsure).

Answer: True

1. (True or False) We cannot commit changes in the working directory directly to the repo without adding it to the staging index first (read the documentation if you are unsure).

Answer: True

1. (True or False) git log -p and git log will give you the same output.

Answer: False. -p here stands for Adds the actual diff/patch for each commit, showing exactly what lines were added, removed, or modified.

1. (True or False) git log --oneline and git log --stat will give you the same output.

Answer: False. The git log --oneline will only show the abbreviated commit hash and the commit message in one line per commit. On the other hand, the git log --stat will show more detailed information including the full commit hash, author, dates and the statistics of modifications in the commits.

1. (True or False) It is recommended that in most cases we should use git revert rather than git reset to undo commits because git revert is safer.   
   Answer: True. git revert will preserve the original commit history instead of rewriting it and the git reset is the opposite.