Homework: 03

16. Technomakers: Anupam Kumar (11940160), Abdur Rahman Khan (11940020), Ruchit Prakash Saxena (11941040)

2. (a)
The git commands are as follows :

$ git branch test
$ git commit
$ git checkout test
$ git commit
$ git checkout master
$ git merge test

Now the given git graph is formed shown in **figure 1.1**

$ git checkout HEAD^

The graph after doing this is shown in **figure 1.2**

When we execute the git command $ **git checkout HEAD^** then,
to resove the ambiguity , git makes use of SHA value or hash value of the merge commit which contains information about the branch which is merged with the other branch hence , since we checked out **master** before merging with **test** so, after merging, git stores the commit hash value b2cd7bd.. as the parent commit(into which the other branch is merged) and also stores the hash value of the commit of **test** branch i.e., clf9449.. as the commit of branch which has been merged .
Hence, git resolves the ambiguity by checking the hash value of the merge commit i.e, 85931fe..
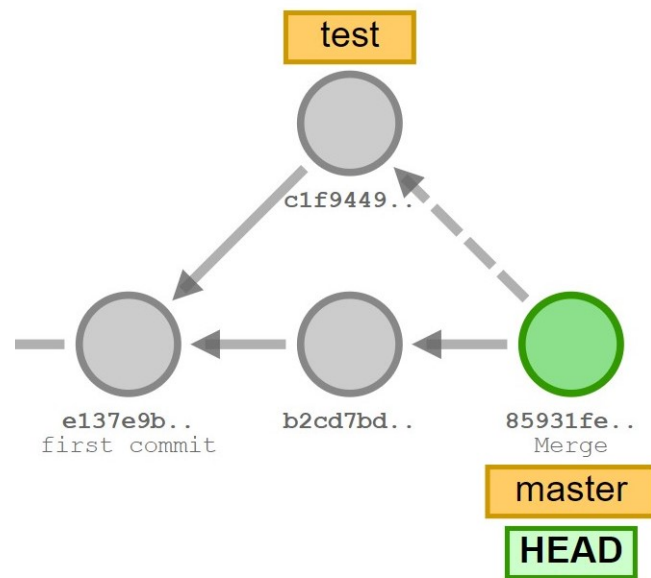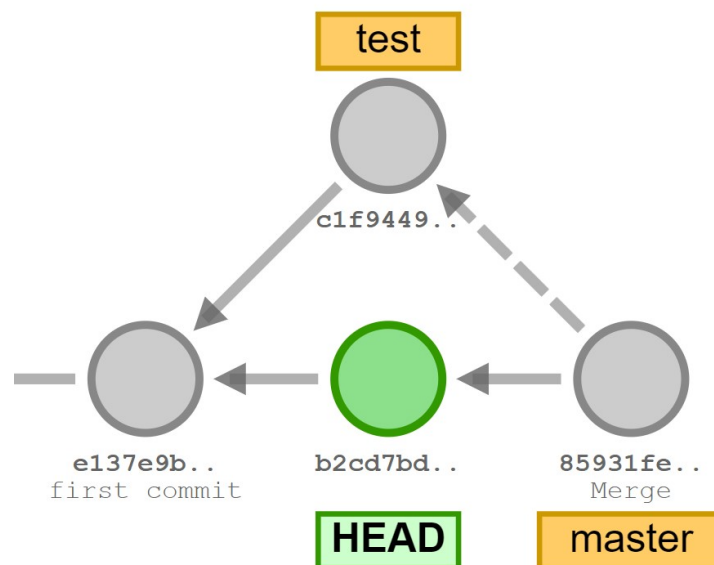
Figure 1.1: After merging test

Figure 1.2: After checking out HEAD to one commit before

2. (b)

The git commands are as follows :

$ git branch test
$ git commit
$ git checkout test
$ git commit
$ git merge master

Now the given git graph is formed shown in **figure 1.3**

$ git checkout HEAD^

The graph after doing this is shown in **figure 1.4**

When we execute the git command $ **git checkout HEAD^** then,
to resove the ambiguity , git makes use of SHA value or hash value of the merge commit which contains information about the branch which is merged with the other branch hence , since we checked out **test** before merging with **master** so, after merging, git stores the commit hash value be30631.. as the parent commit(into which the other branch is merged) and also stores the hash value of the commit of **master** branch i.e., efb53d5.. as the commit of branch which has been merged .
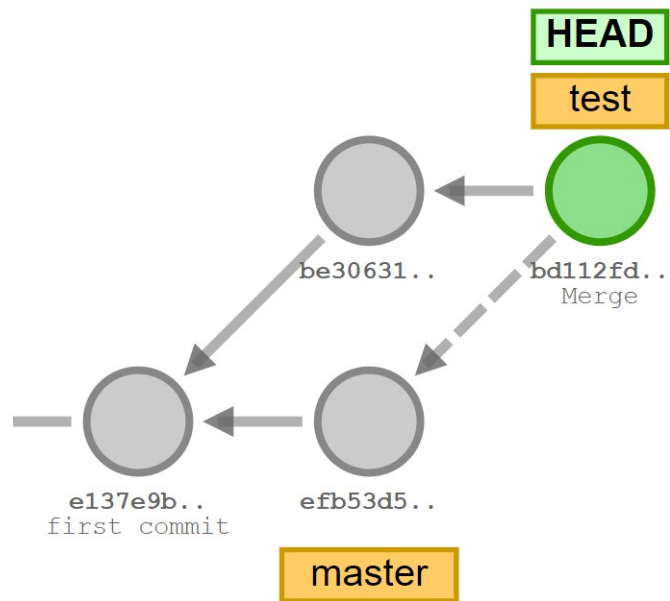Hence, git resolves the ambiguity by checking the hash value of the merge commit i.e, bd112fd..
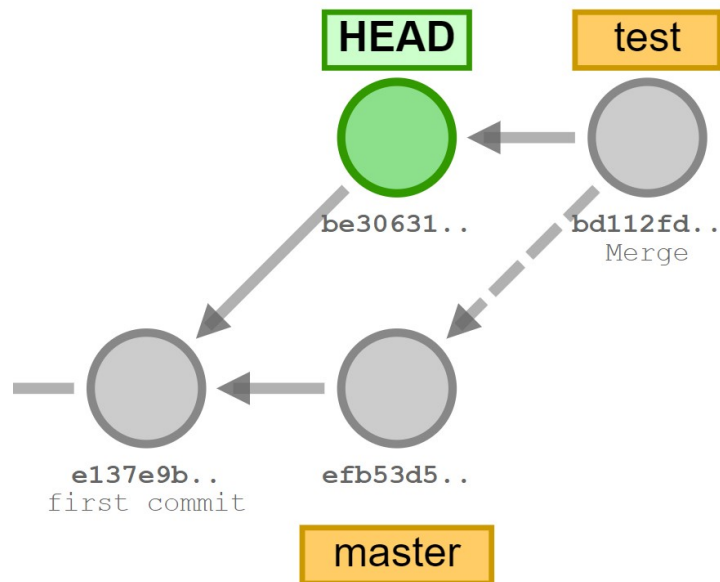
Figure 1.3: After merging master

Figure 1.4: After checking out HEAD to one commit before