

Git under the hood

```
$ git init  
$ echo "important" > file.txt  
$ git add file.txt  
$ git commit -m "Add file"
```

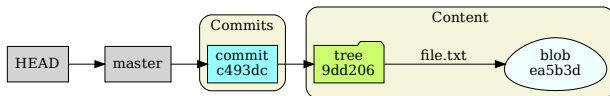


Figure 1: Visualization of the `.git/objects` directory

$$\text{git add} \approx \begin{cases} \text{git hash-object} \\ \text{git update-index} \end{cases}$$
$$\text{git commit} \approx \begin{cases} \text{git write-tree} \\ \text{git commit-tree} \end{cases}$$