

1. Run numb init to initialize.

Observe: (1) numb.json (2) .numb (3) a new branch called numb

```
demo git:(master) numb init
demo git:(master) ls -a
.
..
.git          .gitignore  .numb       .vscode     __pycache__ lenet.py    numb.json   test.py     train.py
demo git:(master) git branch
* master
  numb
```

2. Run numb train

Observe:

```
demo git:(master) numb train
NO OP FOR TEST!
Done Training!
Nothing Stashed!
demo git:(master) █
```

Note: the output may not make sense and is subject to changes

3. Run numb test

Observe:

```
demo git:(master) numb test
This model has been trained with following parameters.
Simply hit enter to use the latest. Or input the number to specify.

0: {"learning_rate": 0.01, "epoch": 1, "batch_size": 100}

Use parameter: █
```

After inputting 0 or simply hitting enter:

```

→ demo git:(master) numb test
This model has been trained with following parameters.
Simply hit enter to use the latest. Or input the number to specify.

0: {"learning_rate": 0.01, "epoch": 1, "batch_size": 100}

Use parameter:
State Dict Filename: .numb/2017-11-27 04:30:55.390069 -0600 CST m=+1.322820938
NO OP FOR STATE DICT!
→ demo git:(master)

```

4. Testing version control system

```

import sys
sys.path.append('/Users/dwd/go/src/github.com/user/numb')

from lenet import LeNet
# I am making change
model = LeNet() # chaaaaange!

```

Make changes in places

```

18 # set parameters!
19 learning_rate = 0.01
20 epoch = 1
21 batch_size = 10 # becomes ten
22

```

Run numb train; On branch master the status should remain unchanged.

```

→ demo git:(master) X git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   test.py
        modified:   train.py

no changes added to commit (use "git add" and/or "git commit -a")
→ demo git:(master) X numb train
NO OP FOR TEST!
Done Training!
Trying to resolve conflicts
Commit Made: 9424a659337eb836e242424df93a59d73bf64c29
→ demo git:(master) X git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   test.py
        modified:   train.py

no changes added to commit (use "git add" and/or "git commit -a")
→ demo git:(master) X

```

However on

```

commit 9424a659337eb836e242424df93a59d73bf64c29 (HEAD -> numb)
Author: Guohao Dou <gdou2@illinois.edu>
Date:   Mon Nov 27 04:38:28 2017 -0600

    Trained at 2017-11-27 04:38:28.495613 -0600 CST m=+2.215286243

```

branch numb, there should be:

Note: the two git hashes should be identical.