1.

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
```

2

```
commit 87ed85b8b76d80c5ffb03c1d421f82252483901b (HEAD -> master)
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Thu Dec 11 00:37:28 2025 +0700

    Проверка

commit c7d677b473710dbccdf9870f0afedf5f278b178c (origin/master)
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Thu Dec 11 00:27:40 2025 +0700

    пока

commit 195457cfca76a8a3ca71652e1835b0e9437d0281
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Wed Dec 10 23:44:32 2025 +0700

    добавил текст

commit 9a333cc1a0ae0d18725d75d6b9d3b2e77ef21d9f
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Wed Dec 10 23:20:24 2025 +0700

    first commit
```

3

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        sort.c

no changes added to commit (use "git add" and/or "git commit -a")
```

4

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   sort.c

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md
```

5

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
```

6

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   sort.c

no changes added to commit (use "git add" and/or "git commit -a")
```

7

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   sort.c
```

8

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   sort.c

no changes added to commit (use "git add" and/or "git commit -a")
```

9

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git log
commit d79c758d07f49d78249366ce8204dbfe530a7aa0 (HEAD -> master)
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Thu Dec 11 10:58:00 2025 +0700

    изменил файл sort.c

commit 0ade11f05abf7475af74994e7dba0c030b72b7b6 (origin/master)
Merge: cfabc19 3510c01
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Thu Dec 11 10:47:00 2025 +0700

    Merge branch 'master' of https://github.com/Metlaev/KURS1

commit cfabc19554011c9c99be616a20b70c0c2dc9fdca
Author: Metlaev <jojotopnikita@gmail.com>
Date:   Thu Dec 11 10:13:34 2025 +0700

    Добавил файл sort.c и удалил текст из README.md

commit 3510c012cc7c1097207821447136a38941610e1a
Author: Nikita Metlaev <88430798+Metlaev@users.noreply.github.com>
Date:   Thu Dec 11 09:52:53 2025 +0700
```

10

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git push
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 20 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 638 bytes | 638.00 KiB/s, done.
Total 6 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 1 local object.
To https://github.com/Metlaev/KURS1.git
   0ade11f..75d056e  master -> master
```

11

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git branch my_branch
dushegub@HOME-PC:~/KURS1/lab9_git$ git branch
* master
  my_branch
```

12

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
dushegub@HOME-PC:~/KURS1/lab9_git$ git switch my_branch
Switched to branch 'my_branch'
dushegub@HOME-PC:~/KURS1/lab9_git$ git status
On branch my_branch
nothing to commit, working tree clean
```

В начале мы находимся в ветке мастер, она такая же, как и удалённая эта же ветка. Переходим в ветку my_branch, он аналогичен master.

13

```
dushegub@HOME-PC:~/KURS1/lab9_git$ touch file1.txt; touch Nikita
dushegub@HOME-PC:~/KURS1/lab9_git$ ls
 Nikita  README.md  file1.txt  sort.c
dushegub@HOME-PC:~/KURS1/lab9_git$ git add file1.txt; git add Nikita
dushegub@HOME-PC:~/KURS1/lab9_git$ git commit -m "Добавил в ветку my_branch 2 файла"
 [my_branch 1a100b4] Добавил в ветку my_branch 2 файла
  2 files changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 Nikita
  create mode 100644 file1.txt
```

Добавил 2 файла в удалённый репозиторий и сделал коммит, говорящий об этом.

14

```
● dushegub@HOME-PC:~/KURS1/lab9_git$ git log --oneline --graph
 * 1a100b4 (HEAD -> my_branch) Добавил в ветку my_branch 2 файла
 * 75d056e (origin/master, master) Добавил файл в staged
 * d79c758 изменил файл sort.c
 *   0ade11f Merge branch 'master' of https://github.com/Metlaev/KURS1
 |\
 | * 3510c01 Update README.md
 | * a7dac1e Update README.md
 * | cfabc19 Добавил файл sort.c и удалил текст из README.md
 * | 87ed85b Проверка
 |/
 * c7d677b пока
 * 195457c добавил текст
 * 9a333cc first commit
```

Теперь на этот коммит ветки my_branch указывает HEAD, но он ещё не на удалённом репозитории

15

```
● dushegub@HOME-PC:~/KURS1/lab9_git$ git switch master
 Switched to branch 'master'
 Your branch is up to date with 'origin/master'.
● dushegub@HOME-PC:~/KURS1/lab9_git$ git log --oneline --graph
 * 75d056e (HEAD -> master, origin/master) Добавил файл в staged
 * d79c758 изменил файл sort.c
 *   0ade11f Merge branch 'master' of https://github.com/Metlaev/KURS1
 |\
 | * 3510c01 Update README.md
 | * a7dac1e Update README.md
 * | cfabc19 Добавил файл sort.c и удалил текст из README.md
 * | 87ed85b Проверка
 |/
 * c7d677b пока
 * 195457c добавил текст
 * 9a333cc first commit
```

Теперь HEAD указывает на последний коммит в ветке master, который выгружен на удалённый репозиторий.

16

```
● dushegub@HOME-PC:~/KURS1/lab9_git$ touch file2.txt; git add file2.txt
● dushegub@HOME-PC:~/KURS1/lab9_git$ git commit -m "Создал файл в ветке master"
 [master 15bb887] Создал файл в ветке master
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 file2.txt
● dushegub@HOME-PC:~/KURS1/lab9_git$ git log --oneline --graph --all
 * 15bb887 (HEAD -> master) Создал файл в ветке master
 | * 1a100b4 (my_branch) Добавил в ветку my_branch 2 файла
 |/
 * 75d056e (origin/master) Добавил файл в staged
 * d79c758 изменил файл sort.c
```

Добавил 2 файла в ветку master и закоммитил их. На этот раз видно, что у нас появилась вторая ветка с другим коммитом.

17

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git switch my_branch
Switched to branch 'my_branch'
dushegub@HOME-PC:~/KURS1/lab9_git$ ls
Nikita  README.md  file1.txt  sort.c
```

Переключился на другую ветку, и теперь я не вижу file2.txt.

18

```
dushegub@HOME-PC:~/KURS1/lab9_git$ git diff my_branch master
diff --git a/file1.txt b/file1.txt
deleted file mode 100644
index e69de29..0000000
diff --git a/Nikita b/file2.txt
similarity index 100%
rename from Nikita
rename to file2.txt
```

Посмотрел разницу между 2 ветками, например, в одной ветке есть file1.txt, а в другой его нет.