```
[bonia@MacBook-Pro-Vadim lab3 % git clone https://github.com/vadimpopov1/C-Progra]
mming.git
Cloning into 'C-Programming'...
remote: Enumerating objects: 306, done.
remote: Counting objects: 100% (89/89), done.
remote: Compressing objects: 100% (85/85), done.
remote: Total 306 (delta 41), reused 1 (delta 1), pack-reused 217 (from 1)
Receiving objects: 100% (306/306), 2.55 MiB | 801.00 KiB/s, done.
Resolving deltas: 100% (107/107), done.
[bonia@MacBook-Pro-Vadim lab3 % cd c-programming
[bonia@MacBook-Pro-Vadim c-programming % ls
README.md       practice12      practice4       practice7       practice9
practice10      practice2       practice5       practice8       practice9*
practice11      practice3       practice6       practice8*
bonia@MacBook-Pro-Vadim c-programming %
```

Клонируем репозиторий и перейдем в него.

```
[bonia@MacBook-Pro-Vadim c-programming % git checkout term-2
branch 'term-2' set up to track 'origin/term-2'.
Switched to a new branch 'term-2'
[bonia@MacBook-Pro-Vadim c-programming % ls
README.md       practice1_2     practice2_2
bonia@MacBook-Pro-Vadim c-programming %
```

При помощи команды git checkout term-2 перейдем в ветку term-2

```
[bonia@MacBook-Pro-Vadim c-programming % mkdir practice3_2
[bonia@MacBook-Pro-Vadim c-programming % cd practice3_2
[bonia@MacBook-Pro-Vadim practice3_2 % ls
bonia@MacBook-Pro-Vadim practice3_2 %
```

Создадим папку practice3_2 и перейдем в нее.

```
bonia@MacBook-Pro-Vadim practice3_2 % git config --global user.name "vadimpopov"

[bonia@MacBook-Pro-Vadim practice3_2 % git config --global user.email "bonia07052]
006@icloud.com"
bonia@MacBook-Pro-Vadim practice3_2 %
```

Установим имя пользователя и email.

```
bonia@MacBook-Pro-Vadim practice3_2 % git status
On branch term-2
Your branch is up to date with 'origin/term-2'.

nothing to commit, working tree clean
bonia@MacBook-Pro-Vadim practice3_2 % git log
commit 88b759ee2ee88b9f03aec3bc7491af5ee91b3b89 (HEAD -> term-2, origin/term-2)
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Mon Mar 10 19:36:09 2025 +0700

    Delete practice3_2 directory

commit 9b57815751c8997232445a62b0a7d784a6a674a1
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Mon Mar 10 19:29:55 2025 +0700

    Create textfile.txt

commit 67977763f01d8e100dbc2bebf91605971fe087d0
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Tue Feb 25 14:11:08 2025 +0700

    Update README.md

commit 2cbd36998e0cf824025a7256b7f875932f170197
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Tue Feb 25 14:10:43 2025 +0700

    Delete practice11 directory
:...skipping...
commit 88b759ee2ee88b9f03aec3bc7491af5ee91b3b89 (HEAD -> term-2, origin/term-2)
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Mon Mar 10 19:36:09 2025 +0700

    Delete practice3_2 directory

commit 9b57815751c8997232445a62b0a7d784a6a674a1
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Mon Mar 10 19:29:55 2025 +0700

    Create textfile.txt

commit 67977763f01d8e100dbc2bebf91605971fe087d0
Author: vadimpopov1 <bonia07052006@icloud.com>
Date:   Tue Feb 25 14:11:08 2025 +0700

    Update README.md

commit 2cbd36998e0cf824025a7256b7f875932f170197
Author: vadimpopov1 <bonia07052006@icloud.com>
```

При помощи команды git status видим, что находимся в ветке term-2. При помощи git log увидим историю коммитов.

```
[bonia@MacBook-Pro-Vadim practice3_2 % nano sort.c
[bonia@MacBook-Pro-Vadim practice3_2 % git status
On branch term-2
Your branch is up to date with 'origin/term-2'.

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

nothing added to commit but untracked files present (use "git add" to track)
bonia@MacBook-Pro-Vadim practice3_2 % 
```

Создадим файл sort.c и запишем в него функцию BubbleSort. Далее введем git status и
увидим что sort.c не отслеживается.

```
[bonia@MacBook-Pro-Vadim practice3_2 % git add sort.c
[bonia@MacBook-Pro-Vadim practice3_2 % git status
On branch term-2
Your branch is up to date with 'origin/term-2'.

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

bonia@MacBook-Pro-Vadim practice3_2 % 
```

Командой git add sort.c добавим файл sort.c в staging area. Проверим статус и увидим
что он staged.

```
[bonia@MacBook-Pro-Vadim practice3_2 % nano sort.c
[bonia@MacBook-Pro-Vadim practice3_2 % git commit -m "New file sort.c"
 [term-2 e6e7086] New file sort.c
  1 file changed, 11 insertions(+)
  create mode 100644 practice3_2/sort.c
[bonia@MacBook-Pro-Vadim practice3_2 % git status
On branch term-2
Your branch is ahead of 'origin/term-2' 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")
bonia@MacBook-Pro-Vadim practice3_2 % 
```

Добавим новую строку в файл sort.c, затем сделаем коммит. Проверим git status и
увидим что modified: sort.c.

```
[bonia@MacBook-Pro-Vadim practice3_2 % git log
commit e6e7086c683d7e5f013fbd288207bd169c58ea61 (HEAD -> term-2)
Author: vadimpopov <bonia07052006@icloud.com>
Date:   Mon Mar 10 19:59:14 2025 +0700

    New file sort.c
```

Прописав команду git log увидим новый лог, что мы добавили новый файл sort.c

```
onia@MacBook-Pro-Vadim practice3_2 % git add sort.c
onia@MacBook-Pro-Vadim practice3_2 % git commit -m "Add new line"
term-2 a5acdba] Add new line
1 file changed, 2 insertions(+)
```

Добавим в stage и закоммитим.

```
bonia@MacBook-Pro-Vadim practice3_2 % git push origin term-2
Username for 'https://github.com': bonia07052006@icloud.com
Password for 'https://bonia07052006@icloud.com@github.com':
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (8/8), 723 bytes | 723.00 KiB/s, done.
Total 8 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
To https://github.com/vadimpopov1/C-Programming.git
   88b759e..a5acdba  term-2 -> term-2
bonia@MacBook-Pro-Vadim practice3_2 %
```

Запушим на удаленный репо.

```
bonia@MacBook-Pro-Vadim practice3_2 % git branch mybranch
bonia@MacBook-Pro-Vadim practice3_2 % git switch mybranch
Switched to branch 'mybranch'
bonia@MacBook-Pro-Vadim practice3_2 % echo "Vadim Popov" > file1.txt
bonia@MacBook-Pro-Vadim practice3_2 %
```

Создадим новую ветку mybranch, переключимся в нее и создадим файл file1.txt с именем.

```
bonia@MacBook-Pro-Vadim practice3_2 % git add file1.txt
git commit -m "Added file1.txt"
[mybranch 7ce5b2d] Added file1.txt
 1 file changed, 1 insertion(+)
 create mode 100644 practice3_2/file1.txt
bonia@MacBook-Pro-Vadim practice3_2 %
```

Добавим файл и сделаем коммит.

```
bonia@MacBook-Pro-Vadim practice3_2 % git log --oneline --graph
* 7ce5b2d (HEAD -> mybranch) Added file1.txt
* a5acdba (origin/term-2, term-2) Add new line
* e6e7086 New file sort.c
* 88b759e Delete practice3_2 directory
* 9b57815 Create textfile.txt
* 6797776 Update README.md
* 2cbd369 Delete practice11 directory
* 0845451 Delete practice12 directory
* 798df78 Delete practice2 directory
* 5aae4e7 Delete practice3 directory
* f61b29e Delete practice4 directory
* 7053931 Delete practice5 directory
* ba32981 Delete practice6 directory
* bb289d9 Delete practice7 directory
* 24036f3 Delete practice8* directory
* 3d1d624 Delete practice8 directory
* 12670b6 Delete practice9* directory
* f672d50 Delete practice9 directory
* fb8deac Delete practice10 directory
* c5d87fd Update README.md
* d6611b5 Update README.md
* 6699cdb Update README.md
* b8cabd7 Create main.c
* ae25657 Update README.md
* 9a2b319 Update README.md
* 14a90c8 Update README.md
* 36f21af Create main.c
```

Просмотрим лог файл при помощи git log --oneline --graph.

```
bonia@MacBook-Pro-Vadim practice3_2 % git switch term-2
Switched to branch 'term-2'
Your branch is up to date with 'origin/term-2'.
bonia@MacBook-Pro-Vadim practice3_2 % echo "New file" > file2.txt
bonia@MacBook-Pro-Vadim practice3_2 % git add file2.txt
git commit -m "Added file2.txt"
[term-2 f5c7c3b] Added file2.txt
 1 file changed, 1 insertion(+)
 create mode 100644 practice3_2/file2.txt
bonia@MacBook-Pro-Vadim practice3_2 % 
```

Переключимся на master-ветку (term-2). Создадим файл file2.txt с содержимым "New file". Закоммитим.

```
* f5c7c3b (HEAD -> term-2) Added file2.txt
| * 7ce5b2d (mybranch) Added file1.txt
|/
* a5acdba (origin/term-2) Add new line
* e6e7086 New file sort.c
```

Просмотрим лог.

```
bonia@MacBook-Pro-Vadim practice3_2 % git switch mybranch
Switched to branch 'mybranch'
bonia@MacBook-Pro-Vadim practice3_2 % ls
file1.txt          sort.c
bonia@MacBook-Pro-Vadim practice3_2 % git log --oneline --graph --all
* f5c7c3b (term-2) Added file2.txt
| * 7ce5b2d (HEAD -> mybranch) Added file1.txt
|/
* a5acdba (origin/term-2) Add new line
* e6e7086 New file sort.c
[bonia@MacBook-Pro-Vadim practice3_2 % git diff mybranch term-2
diff --git a/practice3_2/file1.txt b/practice3_2/file1.txt
deleted file mode 100644
index ca0f8b6..0000000
--- a/practice3_2/file1.txt
+++ /dev/null
@@ -1 +0,0 @@
-Vadim Popov
diff --git a/practice3_2/file2.txt b/practice3_2/file2.txt
new file mode 100644
index 0000000..ea450f9
--- /dev/null
+++ b/practice3_2/file2.txt
@@ -0,0 +1 @@
+New file
bonia@MacBook-Pro-Vadim practice3_2 %
```

Сравним и убедимся что в mybranch нет file2.txt.