

1. Просмотрите историю коммитов в своём проекте и выберите три случайных коммита. Просмотрите изменения, которые были в них сделаны.

```
denmiagkov@laptop: ~/GeekBrains/git/homework/git.homework1
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git log
commit c103207c481cff8f9bcb287eebc0eacc904eaa4e (HEAD -> main)
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:23:10 2023 +0300

    delete comment

commit 177531c7b595f75f4b6740a6de9610a418d01825
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:12:16 2023 +0300

    add gitignore

commit 8dc6044f31a2b065073e1d395f4c3eb531acf843
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:06:18 2023 +0300

    add another comment

commit ace02fdbd5920ddcad843ba92942b0965cb0163a
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:04:39 2023 +0300

    add comment

commit 1838a4f98ebe304fc117fde54f98dbaa1da48aa3
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:03:26 2023 +0300

    print homework number

commit dd131d23faf06cc6f7334939336a80244f01cb15
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:01:44 2023 +0300

    show random number

commit 4853ba24aac78bb40f70ed1db7d61ed38fb3e838
```

```
denmiagkov@laptop: ~/GeekBrains/git/homework/git.homework1
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git diff 8dc6
diff --git a/.gitignore b/.gitignore
new file mode 100644
index 0000000..41a8597
--- /dev/null
+++ b/.gitignore
@@ -0,0 +1,4 @@
+..gitignore.swp
+.idea/
+git.homework1.iml
+out/
diff --git a/Main.java b/Main.java
index 06df47b..b08e742 100644
--- a/Main.java
+++ b/Main.java
@@ -6,8 +6,6 @@ public class Main {

    System.out.println("This is homework 2");
-
-    //this is just a comment
-
-    //this is another comment
-
-    }
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git diff 1838 8dc6
diff --git a/Main.java b/Main.java
index e407fa6..06df47b 100644
--- a/Main.java
+++ b/Main.java
@@ -3,6 +3,11 @@ package src.homework1;
public class Main {
    public static void main(String[] args) {
        System.out.println(Math.random());
+
+        System.out.println("This is homework 2");
+
+        //this is just a comment
+
+        //this is another comment
+
    }
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git diff dd13 1838
diff --git a/Main.java b/Main.java
index c051c05..e407fa6 100644
--- a/Main.java
+++ b/Main.java
@@ -3,5 +3,6 @@ package src.homework1;
public class Main {
    public static void main(String[] args) {
        System.out.println(Math.random());
+        System.out.println("This is homework 2");
    }
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$
```

2. Верните эти изменения командой `git revert` последовательно, чтобы в итоге получилось тоже три коммита.

```
denmiagkov@laptop: ~/GeekBrains/git/homework/git.homework1
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git revert 8dc6
Auto-merging Main.java
CONFLICT (content): Merge conflict in Main.java
error: could not revert 8dc6044... add another comment
hint: after resolving the conflicts, mark the corrected paths
hint: with 'git add <paths>' or 'git rm <paths>'
hint: and commit the result with 'git commit'
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ cat Main.java
package src.homework1;

public class Main {
    public static void main(String[] args) {
        System.out.println(Math.random());

        System.out.println("This is homework 2");
    }
}
<<<<<< HEAD
//this is another comment
=====
//this is just a comment
>>>>>> parent of 8dc6044... add another comment
}
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ nano Main.java

Use "fg" to return to nano.

[1]+  Stopped                  nano Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ nano Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ nano Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
You are currently reverting commit 8dc6044.
  (fix conflicts and run "git revert --continue")
  (use "git revert --skip" to skip this patch)
  (use "git revert --abort" to cancel the revert operation)

Unmerged paths:
  (use "git restore --staged <file>..." to unstage)
  (use "git add <file>..." to mark resolution)
    both modified:   Main.java

no changes added to commit (use "git add" and/or "git commit -a")
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git commit -am "commit 8dc6 r
everted"
[main 0b80405] commit 8dc6 reverted
 1 file changed, 1 insertion(+), 1 deletion(-)
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$
```

```

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git revert 1838
Auto-merging Main.java
CONFLICT (content): Merge conflict in Main.java
error: could not revert 1838a4f... print homework number
hint: after resolving the conflicts, mark the corrected paths
hint: with 'git add <paths>' or 'git rm <paths>'
hint: and commit the result with 'git commit'
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ cat Main.java
package src.homework1;

public class Main {
    public static void main(String[] args) {
        System.out.println(Math.random());
<<<<<< HEAD

        System.out.println("This is homework 2");

        //this is just a comment
=====
>>>>>> parent of 1838a4f... print homework number
    }
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ nano Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git commit -am "commit 1838 r
everted"
[main cf598e4] commit 1838 reverted
1 file changed, 2 deletions(-)
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$

```

```

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git revert dd13
Auto-merging Main.java
CONFLICT (content): Merge conflict in Main.java
error: could not revert dd131d2... show random number
hint: after resolving the conflicts, mark the corrected paths
hint: with 'git add <paths>' or 'git rm <paths>'
hint: and commit the result with 'git commit'
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ cat Main.java
package src.homework1;

public class Main {
<<<<<< HEAD
    public static void main(String[] args) {
        System.out.println(Math.random());

        System.out.println("This is homework 2");
    }
=====
>>>>>> parent of dd131d2... show random number
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ nano Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
You are currently reverting commit dd131d2.
  (fix conflicts and run "git revert --continue")
  (use "git revert --skip" to skip this patch)
  (use "git revert --abort" to cancel the revert operation)

Unmerged paths:
  (use "git restore --staged <file>..." to unstage)
  (use "git add <file>..." to mark resolution)
    both modified:   Main.java

no changes added to commit (use "git add" and/or "git commit -a")
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git commit -am "commit dd13 r
everted"
[main 711c30d] commit dd13 reverted
1 file changed, 4 deletions(-)
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$

```

3. Попробуйте отменить эти три коммита:

\* последний — командами `git reset --soft` и `git restore`;

```
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git log
commit 711c30d76a1f8530547a9b20255625e927e59a91 (HEAD -> main)
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:48:16 2023 +0300

    commit dd13 reverted

commit cf598e4f672738e8c7f440b86fa2ce91147919ee
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:44:49 2023 +0300

    commit 1838 reverted

commit 0b80405954058cac82fc93cf3408b52466d8309c
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:38:39 2023 +0300

    commit 8dc6 reverted

commit c103207c481cff8f9bcb287eebc0eacc904eaa4e
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:23:10 2023 +0300

    delete comment
```

```
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git reset --soft
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
nothing to commit, working tree clean
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git reset --soft cf59
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   Main.java

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git log
commit cf598e4f672738e8c7f440b86fa2ce91147919ee (HEAD -> main)
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:44:49 2023 +0300

    commit 1838 reverted

commit 0b80405954058cac82fc93cf3408b52466d8309c
Author: Denis Miagkov <tomich-84@mail.ru>
Date: Tue Dec 5 23:38:39 2023 +0300

    commit 8dc6 reverted
```

```

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git restore
fatal: you must specify path(s) to restore
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git restore Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   Main.java

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git restore --staged Main.java
a
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
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:   Main.java

no changes added to commit (use "git add" and/or "git commit -a")
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git restore Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
nothing to commit, working tree clean
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ cat Main.java
package src.homework1;

public class Main {
    public static void main(String[] args) {
        System.out.println(Math.random());

        System.out.println("This is homework 2");
    }
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$

```

последующие коммиты, сохран

\*предпоследний — командой git reset --mixed и git restore;

```

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git reset --mixed 0b80
Unstaged changes after reset:
M      Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
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:   Main.java

no changes added to commit (use "git add" and/or "git commit -a")
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git diff
diff --git a/Main.java b/Main.java
index c44a327..baa4c1f 100644
--- a/Main.java
+++ b/Main.java
@@ -5,7 +5,5 @@ public class Main {
    System.out.println(Math.random());

    System.out.println("This is homework 2");
-
-    //this is just a comment
}
}
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git restore Main.java
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git status
On branch main
nothing to commit, working tree clean

```

\* первый — командой git reset —hard.

```

denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git reset --hard HEAD^
HEAD is now at c103207 delete comment
denmiagkov@laptop:~/GeekBrains/git/homework/git.homework1$ git log
commit c103207c481cff8f9bcb287eebc0eacc904eaa4e (HEAD -> main)
Author: Denis Miagkov <tomich-84@mail.ru>
Date:   Tue Dec 5 23:23:10 2023 +0300

    delete comment

```