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# Git w Green Man Gaming

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**green man  
gaming**

**34TH**  
**GOLDEN**  
**JOYSTICK**  
**AWARDS**



—

# Dlaczego git?

“

18-latek chciał

**WYCZYŚCIĆ**

komputer, **WYSADZIŁ**

mieszkanie

”



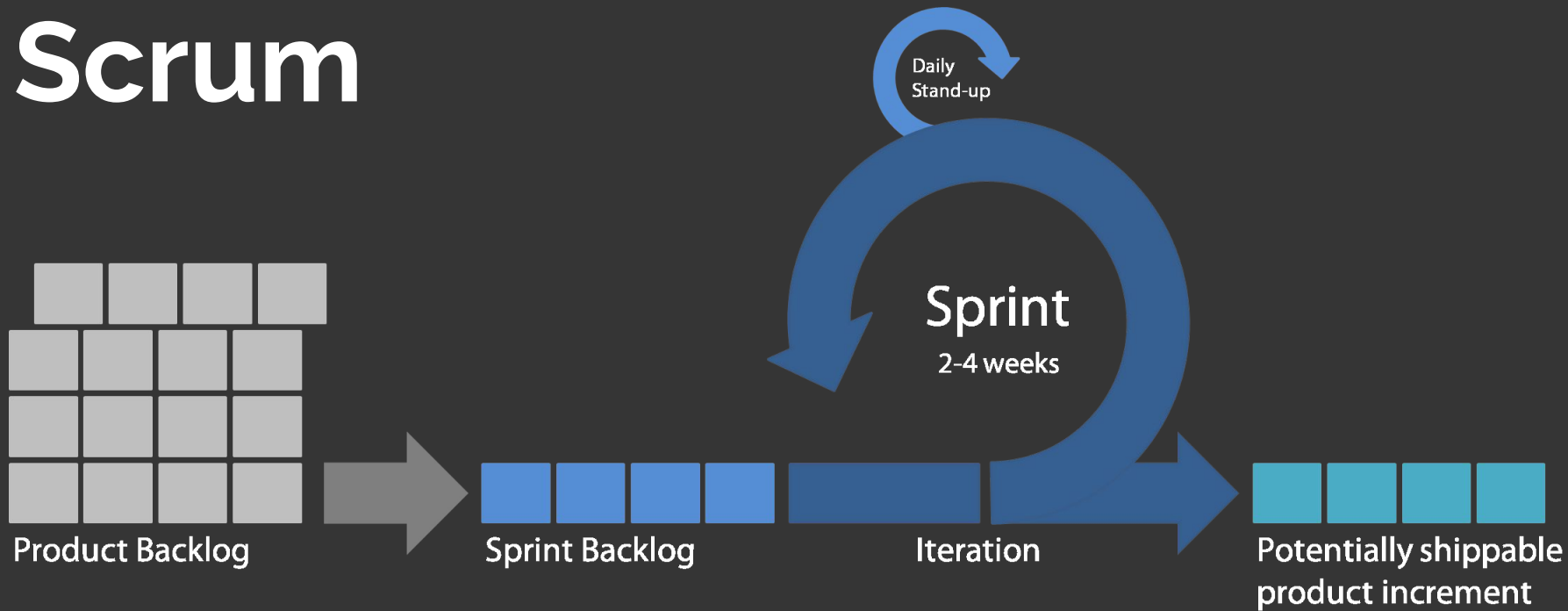
A photograph of five men standing in a room, likely a workshop or office. From left to right: a man with dark hair in a purple and yellow striped sweater; a man with long hair and glasses in a plaid shirt; a man with short brown hair in a maroon hoodie; a man with short brown hair in a tan sweater; and a man with long curly hair and a beard in a blue sweater, resting his chin on his hand. The background features a wooden wall with a mounted animal head, a bookshelf, and a framed picture.

## Team work

Zespoły mają od paru do kilkunastu osób

# Organizacja pracy

# Scrum





# Kanban

## BACKLOG

- Set the table (Wife hates for Dad!) 2
- MAKE the gravy 2
- eat meal 4
- Boke the pies 5
- Serve booze (no hard liquor for old people) 2
- Argue over politics 4
- Prep and roast the turkey 3
- serve meal 2
- Fake headache to get 15 minutes of peace & quiet 1
- CARVE turkey 3
- Give thanks before meal (don't forget family this year) 1
- Argue over religion 3
- Staunch bleeding after cutting self carving bird 1
- Ignore complaints about lumpy gravy 1
- Cut mom off from booze 1-2
- Argue with mom about cutting her off from booze 2
- Serve pie 1
- Argue over the size of pie slices 2
- Delete out left overs (not booze!) 2
- Guilt guests into helping clean up 1
- Send written apologies after the smoke clears 2

## In Progress

- Practice deep breathing techniques to calm self. 3
- Choose seating assignments to minimize conflict. 10

## Completed

- Invite Family members (yes, even in-laws) 1
- Order turkey from butcher 1
- Decide on menu 4
- Complain about turkey prices 5
- Go food shopping 3
- Decide on booze 8
- Buy booze (take SUV) 2

## Team Scrum Board

[Plan](#)
[Work](#)
[Report](#)
[Board](#)

SPRINT: Sprint 3

QUICK FILTERS: Product

[UI](#)
[Server](#)
[Only My Issues](#)
[Recently Updated](#)

### To Do

- TIS-28  
 ↑ Research options to travel to Pluto  
 5
- TIS-8  
 ↑ Requesting available flights is now taking > 5 seconds

### In Progress

- TIS-27  
 ↑ Add Phobos and Deimos Tours as a Preferred Travel Partner  
 8
- TIS-10  
 ↑ Bad JSON data coming back from hotel API
- TIS-25  
 ↑ Engage Jupiter Express for outer solar system travel  
 5
- TIS-20  
 ↑ Engage Saturn Shuttle Lines for group tours  
 3

### In Review

- TIS-58  
 Add feedback button to the plugin sample code
- TIS-45  
 ↑ Email non registered users to sign up with Teams In Space  
 2

### Done

- TIS-9  
 After 100,000 requests the SeeSpaceEZ server dies
- TIS-16  
 ↑ Establish relationship with local office supplies company  
 3
- TIS-7  
 ↑ 500 Error when requesting a reservation
- TIS-11  
 ↑ Register with the Mars Ministry of Labor  
 2

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# Forking workflow

# Forking workflow

- DevOps inicjalizuje oficjalne repozytorium
  - Deweloperzy tworzą forki oficjalnego repozytorium
  - Deweloperzy klonują swoje repozytoria
  - Deweloperzy pracują nad swoimi zmianami i publikują je
  - DevOps integruje zmiany deweloperów do oficjalnego repozytorium
  - Deweloperzy synchronizują się z oficjalnym repozytorium

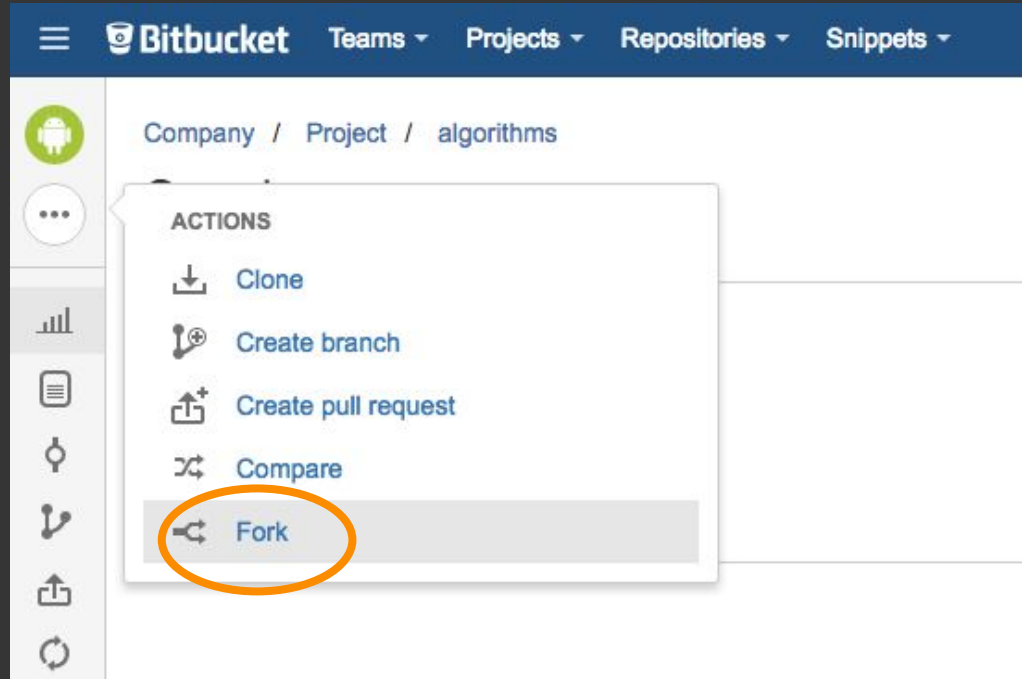
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```
git@bitbucket.org:companyname/algorithms.git
```

# Forking workflow

- DevOps inicjalizuje oficjalne repozytorium
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# fork





# fork

This screenshot shows the top navigation bar and repository header of a GitHub page. The repository is identified as 'django / django'. The navigation bar includes a search box for 'This repository', links for 'Pull requests', 'Issues', and 'Gist', and a notification bell icon. The repository header displays the repository name, a 'Watch' button with 1,375 subscribers, a 'Star' button with 22,796 stars, and a 'Fork' button with 9,210 forks. The 'Fork' button is highlighted with an orange circle. Below the repository name, there are tabs for '<> Code', 'Pull requests 106', 'Projects 0', 'Pulse', and 'Graphs'.

GitHub navigation bar: This repository Search Pull requests Issues Gist

Repository: django / django

Actions: Watch 1,375 Star 22,796 Fork 9,210

Repository tabs: <> Code Pull requests 106 Projects 0 Pulse Graphs

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```
git@bitbucket.org:companyname/algorithms.git
```

```
git@bitbucket.org:wiura/algorithms.git
```

# Forking workflow

- DevOps inicjalizuje oficjalne repozytorium
- Deweloperzy tworzą forki oficjalnego repozytorium
- **Deweloperzy klonują swoje repozytoria**
- Deweloperzy pracują nad swoimi zmianami i publikują je
- DevOps integruje zmiany deweloperów do oficjalnego repozytorium
- Deweloperzy synchronizują się z oficjalnym repozytorium

# git clone

git@bitbucket.org:companyname/algorithms.git

origin

git@bitbucket.org:wiura/algorithms.git

lokalnie

```
→ git clone git@bitbucket.org:wiura/algorithms.git
→ cd algorithms
→ git remote show
origin
```

# git remote add

upstream

```
git@bitbucket.org:companyname/algorithms.git
```

origin

```
git@bitbucket.org:wiura/algorithms.git
```

lokalnie

```
→ git remote add upstream git@bitbucket.org:companyname/algorithms.git  
→ git fetch upstream  
→ git remote show  
origin  
upstream
```

# Forking workflow

- DevOps inicjalizuje oficjalne repozytorium
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- **Deweloperzy pracują nad swoimi zmianami i publikują je**
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# master=upstream/master

upstream

git@bitbucket.org:companyname/algorithms.git

origin

git@bitbucket.org:wiura/algorithms.git

fetch



lokalnie

```
→ git fetch upstream
```

```
→ git checkout master
```

Your branch is behind 'origin/master' by 1 commit, and can be fast-forwarded.

(use "git pull" to update your local branch)

```
→ git reset --hard upstream/master
```

# eng\_113=origin/eng\_113

upstream

git@bitbucket.org:companyname/algorithms.git

fetch

origin

git@bitbucket.org:wiura/algorithms.git

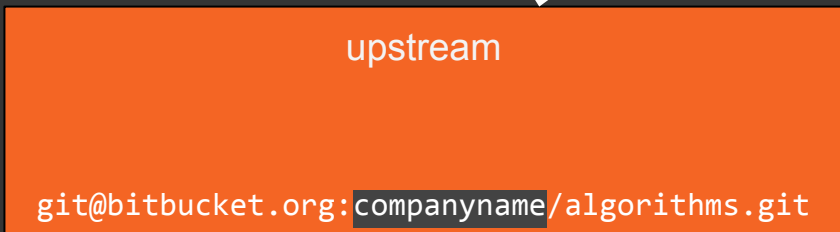
push

lokalnie

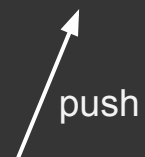
```
→ git checkout -b eng_113  
Switched to a new branch 'eng_113'  
→ git add new_algorithm.py && git commit  
→ git push origin eng_113
```



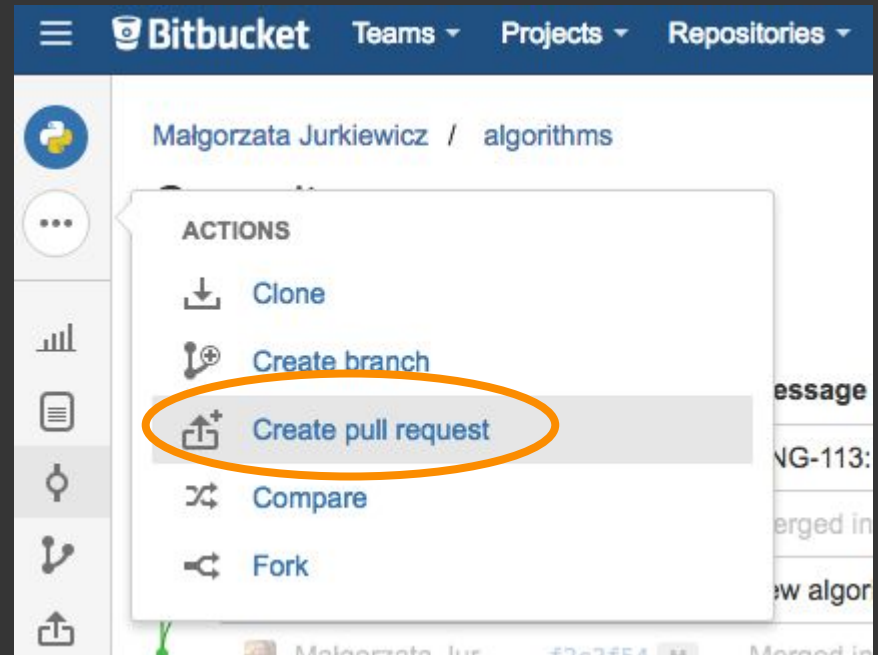
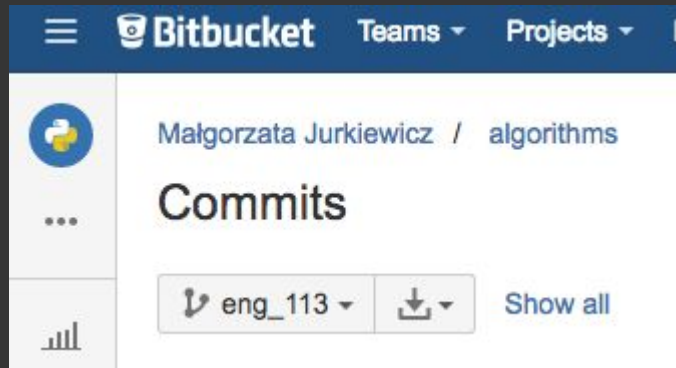
pull request




lokalnie




# pull request





## Create a pull request

 wiura / algorithms  
Created 2016-06-18, updated 7 minutes ago

 eng\_113

→

 companyname/algorithms

 master

Title \* ENG-113: Add new algorithm

Description

**H1** **H2** **H3** **B** *I* **☰** **☷** **☏** **🔗** **🖼️**

**?** Preview

This commit adds new algorithm that multiplies a number by 2.

Create pull request

Diff

Commits

+4 -0 **A** new\_algorithm.py

 new\_algorithm.py **ADDED**

```
1  + # add your code here
2  +
3  + def new_algorithm(x):
4  +     return 2 * x
```

—

# Code review

# Code review

Potrzebujemy dwóch +1 od innych deweloperów

## Files changed (1)

+4

-0

**A** new\_algorithm.py

 new\_algorithm.py **ADDED**

1 `+# add your code here`



**Małgorzata Jurkiewicz** **AUTHOR**

unnecessary comment

[Reply](#) • [Edit](#) • [Delete](#) • [Create task](#) • 46 seconds ago

2 `+`

3 `+def new_algorithm(x):`



**Małgorzata Jurkiewicz** **AUTHOR**

pep8: E302 expected 2 blank lines, found 1

[Reply](#) • [Edit](#) • [Delete](#) • [Create task](#) • a minute ago

4 `+ return 2 * x`

# Forking workflow

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# Forking workflow

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# Przydatne komendy

# gitk

The screenshot shows the gitk application window titled "gitk: libgit2". The interface is divided into several sections:

- Commit History:** A vertical list of commits on the left. The current commit is highlighted in blue. The commit message for the current commit is "Improve test of submodule name sorting".
- Commit Details:** A table on the right showing commit details for the selected commit. The table has columns for the commit hash (SHA1 ID), the author, and the date. The selected commit is highlighted in blue.
- Search:** A search bar with the text "commit containing:" and a dropdown menu. The search results are displayed in a table below the search bar.
- Diff View:** The main area shows a diff view of the selected commit. The diff is for the file "tests/diff/submodules.c". The diff shows changes to the "void test\_diff\_submodules\_\_submod2\_index\_to\_wd(void)" function. The diff is displayed in a color-coded format with green for additions and red for deletions.

SHA1 ID: b76b5d34275fe33192358d4eaa1ae98e31efc2a1

Find: commit containing: [dropdown] Exact All fields [dropdown]

Search: [input]

Diff Old version New version Lines of context: 3 Ignore space change Line diff [dropdown]

Author: Russell Belfer <rb@github.com> 2014-03-31 13:33:11  
Committer: Russell Belfer <rb@github.com> 2014-03-31 13:33:11  
Parent: 7dc42a55f5fdc61e8e8de472ec54ccc0613e23c (Cleanups)  
Child: d67397dd0c82fab82a1e6883107c97c4e133a911 (Merge pull request #2226 from libgit2/r/)  
Branches: development, remotes/origin/development  
Follows: v0.20.0  
Precedes:

Improve test of submodule name sorting

```
----- tests/diff/submodules.c -----
index ead5c71..2881f74 100644
@@ -182,6 +182,8 @@ void test_diff_submodules__submod2_index_to_wd(void)
     "<UNTRACKED>", /* not */
     "diff --git a/sm_changed_file b/sm_changed_file\nindex 4800958..4800958 :
     "diff --git a/sm_changed_head b/sm_changed_head\nindex 4800958..3d9386c :
+     "<UNTRACKED>", /* sm_changed_head- */
+     "<UNTRACKED>", /* sm_changed_head_ */
     "diff --git a/sm_changed_index b/sm_changed_index\nindex 4800958..480095:
     "diff --git a/sm_changed_untracked_file b/sm_changed_untracked_file\nind:
     "diff --git a/sm_missing_commits b/sm_missing_commits\nindex 4800958..Se:
@@ -190,6 +192,10 @@ void test_diff_submodules__submod2_index_to_wd(void)
```

—

**git rebase -i HEAD~3**

# git rebase -i HEAD~3

```
→ git log --pretty=oneline --abbrev-commit
```

```
b7a5d67 ENG-3: Third ticket (3)
```

```
7da55d6 ENG-3: Third ticket (2)
```

```
f2a20e6 ENG-3: Third ticket (1)
```

```
0267a35 ENG-2: Second ticket
```

```
0744c45 ENG-1: First ticket
```

# git rebase -i HEAD~3

```
→ git rebase -i HEAD~3
```

# git rebase -i HEAD~3

```
pick f2a20e6 ENG-3: Third ticket (1)
pick 7da55d6 ENG-3: Third ticket (2)
pick b7a5d67 ENG-3: Third ticket (3)
```

# Commands:

# p, pick = use commit

# r, reword = use commit, but edit the commit message

# e, edit = use commit, but stop for amending

# s, squash = use commit, but meld into previous commit

# f, fixup = like "squash", but discard this commit's log message

# x, exec = run command (the rest of the line) using shell

# git rebase -i HEAD~3

```
pick f2a20e6 ENG-3: Third ticket (1)
s 7da55d6 ENG-3: Third ticket (2)
s b7a5d67 ENG-3: Third ticket (3)
```

# Commands:

# p, pick = use commit

# r, reword = use commit, but edit the commit message

# e, edit = use commit, but stop for amending

# s, squash = use commit, but meld into previous commit

# f, fixup = like "squash", but discard this commit's log message

# x, exec = run command (the rest of the line) using shell



# git rebase -i HEAD~3

```
# This is a combination of 3 commits.  
# The first commit's message is:  
ENG-3: Third ticket (1)  
  
# This is the 2nd commit message:  
  
ENG-3: Third ticket (2)  
  
# This is the 3rd commit message:  
  
ENG-3: Third ticket (3)
```



```
ENG-3: Third ticket
```

# git rebase -i HEAD~3

```
→ git log --pretty=oneline --abbrev-commit
```

```
7094571 ENG-3: Third ticket
```

```
0267a35 ENG-2: Second ticket
```

```
0744c45 ENG-1: First ticket
```

# Commit messages

	COMMENT	DATE
○	CREATED MAIN LOOP & TIMING CONTROL	14 HOURS AGO
○	ENABLED CONFIG FILE PARSING	9 HOURS AGO
○	MISC BUGFIXES	5 HOURS AGO
○	CODE ADDITIONS/EDITS	4 HOURS AGO
○	MORE CODE	4 HOURS AGO
○	HERE HAVE CODE	4 HOURS AGO
○	AAAAAAA	3 HOURS AGO
○	ADKFJSLKDFJSDKLFJ	3 HOURS AGO
○	MY HANDS ARE TYPING WORDS	2 HOURS AGO
○	HAAAAAAAAAANDS	2 HOURS AGO

AS A PROJECT DRAGS ON, MY GIT COMMIT MESSAGES GET LESS AND LESS INFORMATIVE.

ENG-11: Summarize changes in around 50 characters

More detailed explanatory text, if necessary. Wrap it to about 72 characters or so. In some contexts, the first line is treated as the subject of the commit and the rest of the text as the body. The blank line separating the summary from the body is critical (unless you omit the body entirely); various tools like `log`, `shortlog` and `rebase` can get confused if you run the two together.

Explain the problem that this commit is solving. Focus on why you are making this change as opposed to how (the code explains that). Are there side effects or other unintuitive consequences of this change? Here's the place to explain them.

Further paragraphs come after blank lines.

- Bullet points are okay, too

# git rebase --onto

```
A--B master
  \
   E--F--G friend_repo/task1
     \
      H--I task2
```

# git rebase --onto

```
A--B--C--D master
  \
   E--F--G friend_repo/task1
     \
      H--I task2
```

# git rebase --onto

```
A--B--C--D master
      \
        E'--F'--G'
      \
E--F--G friend_repo/task1
      \
        H--I task2
```

# git rebase --onto

```
A--B--C--D master
      \
        E'--F'--G'
      \
        E--F--G friend_repo/task1
              \
                H--I task2
```

```
git fetch friend_repo
```



# git rebase --onto

```
A--B--C--D master
      \
        E'--F'--G' friend_repo/task1
      \
        E--F--G
          \
            H--I task2
```

# git rebase --onto

```
A--B--C--D master
      \
        E'--F'--G' friend_repo/task1
      \
        E--F--G
          \
            H--I task2
```

```
git checkout task2
git rebase --onto friend_repo/task1 G task2
```

# git rebase --onto

```
A--B--C--D master
      \
        E'--F'--G' friend_repo/task1
              \
                H'--I' task2
```

# git blame

```
git blame new_algorithm.py
```

```
7c6fa86e (Gosia Jurkiewicz 2016-12-27 15:03:34 +0100 1) # add your code here
7c6fa86e (Gosia Jurkiewicz 2016-12-27 15:03:34 +0100 2)
00000000 (Not Committed Yet 2017-01-04 17:29:53 +0100 3)
7c6fa86e (Gosia Jurkiewicz 2016-12-27 15:03:34 +0100 4) def new_algorithm(x):
7c6fa86e (Gosia Jurkiewicz 2016-12-27 15:03:34 +0100 5)     return 2 * x
```