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**TU856/3**  
**INTRODUCTION TO DEVOPS**

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**LAB 2 – GIT**



**12/02/2025**

**PAULINA CZARNOTA C21365726**

## LINK TO THE REPOSITORY

<https://github.com/PaulinaCzarnota/devops-lab-2>

## STEP 1: SETTING UP GIT

```
Paulina@LAPTOP-Paulina MINGW64 ~
$ git config --global user.email "paul.czar.14@gmail.com"

Paulina@LAPTOP-Paulina MINGW64 ~
$ git config --global user.name "Paulina Czarnota"

Paulina@LAPTOP-Paulina MINGW64 ~
$ git config --global --list
user.email=paul.czar.14@gmail.com
user.name=Paulina Czarnota
core.editor="C:\Users\35389\AppData\Local\Programs\Microsoft VS Code\bin\code" --wait
filter.lfs.required=true
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
credential.helper=store
```

## STEP 2: CLONING THE GITHUB REPOSITORY LOCALLY

```
Paulina@LAPTOP-Paulina MINGW64 ~
$ git clone https://github.com/PaulinaCzarnota/devops-lab-2.git
Cloning into 'devops-lab-2'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.

Paulina@LAPTOP-Paulina MINGW64 ~
$ cd devops-lab-2

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ ls
README.md
```

## STEP 3: CREATING AND COMMITTING THE FIRST PYTHON PROGRAM

```
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ touch hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git add hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git commit -m "Added Hello World program"
[main 00b8868] Added Hello World program
 1 file changed, 1 insertion(+)
 create mode 100644 hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 317 bytes | 317.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PaulinaCzarnota/devops-lab-2.git
 2195685..00b8868  main -> main
```

PaulinaCzarnota / devops-lab-2

devops-lab-2 Public

main 1 Branch 0 Tags

Go to file Add file Code

PaulinaCzarnota Added Hello World program 00b8868 · 1 minute ago 2 Commits

README.md Initial commit 1 minute ago

hello.py Added Hello World program 1 minute ago

README

devops-lab-2

About

No description, website, or topics provided.

Readme

Activity

0 stars

1 watching

0 forks

Releases

No releases published. [Create a new release](#)

Packages

Commit 00b8868

PaulinaCzarnota committed 2 hours ago

Added Hello World program

main

1 parent 2195685 commit 00b8868

Filter files...

1 file changed +1 -0 lines changed

Search within code

hello.py

he11o.py

```

... @@ -0,0 +1 @@
1 + print("Hello, world!")

```

## STEP 4: MODIFYING THE PYTHON PROGRAM

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git add hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git commit -m "Updated program to print numbers 1-10"
[main 94e3c9a] Updated program to print numbers 1-10
1 file changed, 2 insertions(+), 1 deletion(-)

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 335 bytes | 335.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com:PaulinaCzarnota/devops-lab-2.git
00b8868..94e3c9a main -> main

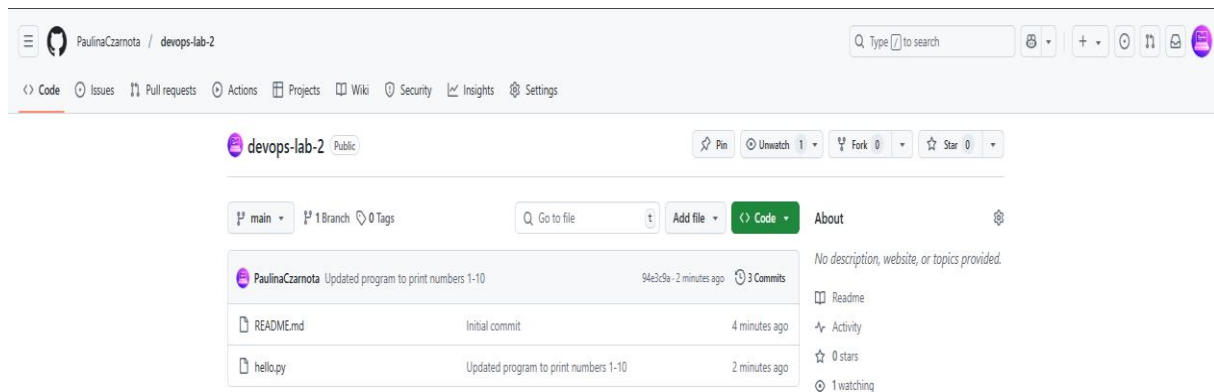
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git log --oneline
94e3c9a (HEAD -> main, origin/main, origin/HEAD) Updated program to print numbers 1-10
00b8868 Added Hello World program
2195685 Initial commit

```

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git diff HEAD~1 HEAD
diff --git a/hello.py b/hello.py
index f7cf60e..b0b64d4 100644
--- a/hello.py
+++ b/hello.py
@@ -1,2 @@
-print("Hello, world!")
+for i in range(1, 11):
+    print(i)

```



## STEP 5: BRANCHING AND MERGING

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git checkout -b new_greeting
Switched to a new branch 'new_greeting'

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (new_greeting)
$ git add hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (new_greeting)
$ git commit -m "Changed greeting to Welcome"
[new_greeting f50a659] Changed greeting to Welcome
1 file changed, 1 insertion(+), 2 deletions(-)

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (new_greeting)
$ git push origin new_greeting
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 312 bytes | 312.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'new_greeting' on GitHub by visiting:
remote:   https://github.com/PaulinaCzarnota/devops-lab-2/pull/new/new_greeting
remote:
To https://github.com/PaulinaCzarnota/devops-lab-2.git
 * [new branch]      new_greeting -> new_greeting

```

PaulinaCzarnota / devops-lab-2

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

devops-lab-2 Public

new\_greeting had recent pushes on 15 lut [Compare & pull request](#)

new\_greeting 2 Branches 0 Tags

This branch is 1 commit ahead of main.

PaulinaCzarnota Changed greeting to Welcome f50a659 · 1 minute ago 4 Commits

README.md	Initial commit	10 minutes ago
hello.py	Changed greeting to Welcome	1 minute ago

About  
No description, website, or topics provided.

Readme  
Activity  
0 stars  
1 watching  
0 forks

Releases  
No releases published  
[Create a new release](#)

PaulinaCzarnota / devops-lab-2

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Commit f50a659 [Preview](#) [Give feedback](#) [Browse files](#)

PaulinaCzarnota committed 2 hours ago

Changed greeting to Welcome

main 1 parent 94e3c9a commit f50a659

Filter files... hello.py

1 file changed +1 -2 lines changed

Search within code

```

hello.py
... @@ -1,2 +1 @@
1 - for i in range(1, 11):
2 -     print(i)
1 + print("Welcome!")

```

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (new_greeting)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git add hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git commit -m "Modified greeting again"
[main 928ac8f] Modified greeting again
1 file changed, 1 insertion(+), 2 deletions(-)

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 322 bytes | 322.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PaulinaCzarnota/devops-lab-2.git
94e3c9a..928ac8f main -> main

```

PaulinaCzarnota / devops-lab-2

new\_greeting had recent pushes 1 minute ago [Compare & pull request](#)

main 2 Branches 0 Tags

Go to file Add file Code

PaulinaCzarnota Modified greeting again 928ac8f · now 4 Commits

README.md	Initial commit	13 minutes ago
hello.py	Modified greeting again	now

About

No description, website, or topics provided.

Readme Activity 0 stars 1 watching 0 forks

Releases

Commit 928ac8f

PaulinaCzarnota committed 2 hours ago

Modified greeting again

main 1 parent 9463c9a commit 928ac8f

Filter files... hello.py

1 file changed +1 -2 lines changed

Search within code

```

... @@ -1,2 +1 @@
1 - for i in range(1, 11):
2 -     print(i)
1 + print("This is another string!")

```

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git checkout main
Already on 'main'
Your branch is up to date with 'origin/main'.

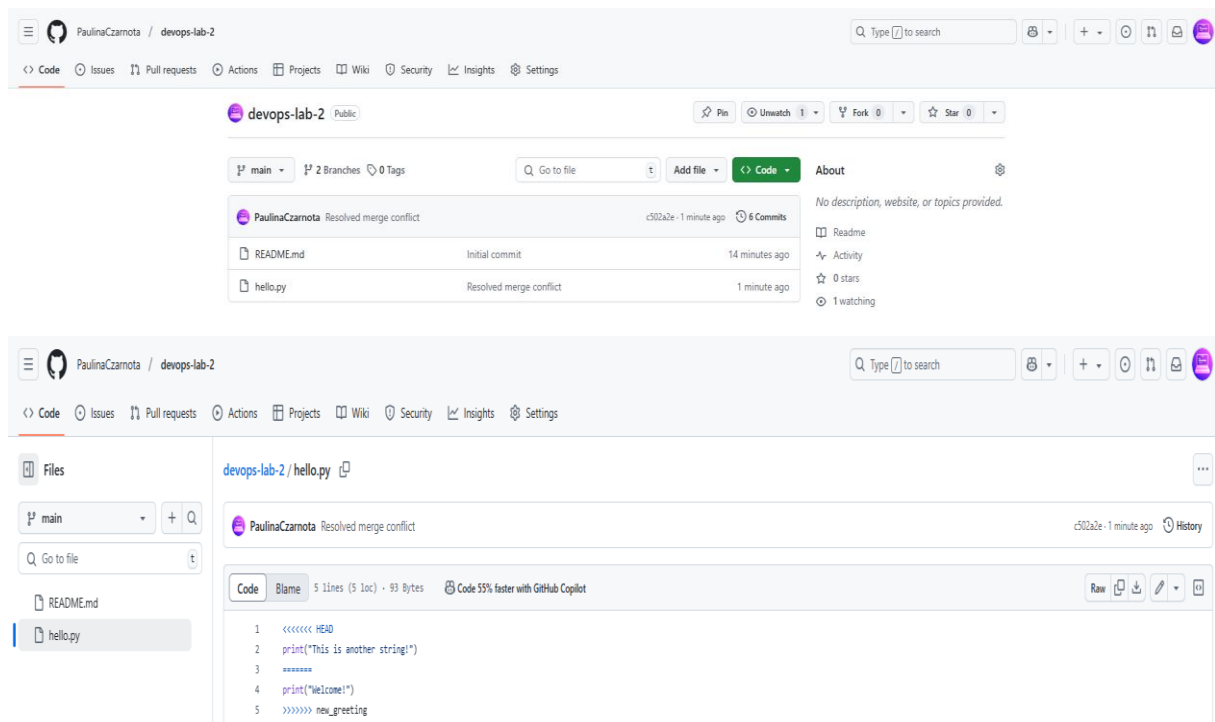
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git merge new_greeting
Auto-merging hello.py
CONFLICT (content): Merge conflict in hello.py
Automatic merge failed; fix conflicts and then commit the result.

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main|MERGING)
$ git add hello.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main|MERGING)
$ git commit -m "Resolved merge conflict"
[main c502a2e] Resolved merge conflict

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 390 bytes | 390.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PaulinaCzarnota/devops-lab-2.git
928ac8f..c502a2e main -> main

```



## STEP 6: PERFORMING A FAST-FORWARD MERGE

```
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git checkout -b fast_forward_test
Switched to a new branch 'fast_forward_test'

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (fast_forward_test)
$ touch average.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (fast_forward_test)
$ git add average.py

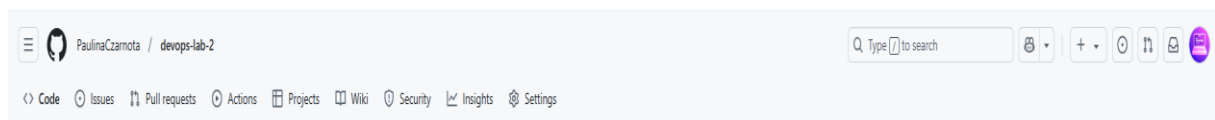
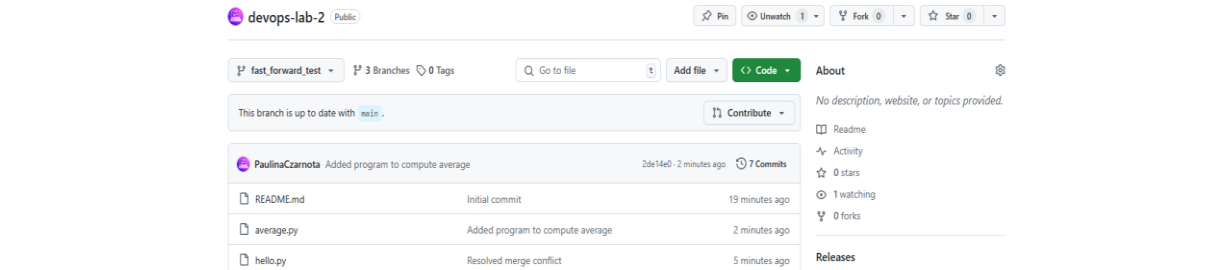
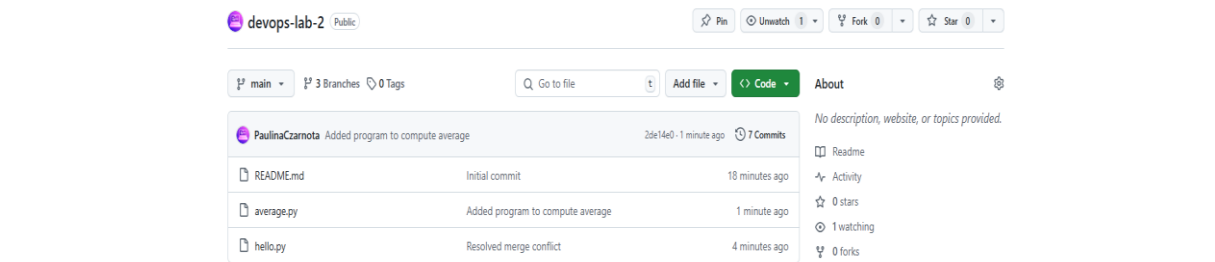
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (fast_forward_test)
$ git commit -m "Added program to compute average"
[fast_forward_test 2de14e0] Added program to compute average
1 file changed, 3 insertions(+)
create mode 100644 average.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (fast_forward_test)
$ git push origin fast_forward_test
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 433 bytes | 433.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'fast_forward_test' on GitHub by visiting:
remote:   https://github.com/PaulinaCzarnota/devops-lab-2/pull/new/fast_forward_test
remote:
To https://github.com/PaulinaCzarnota/devops-lab-2.git
 * [new branch]      fast_forward_test -> fast_forward_test

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (fast_forward_test)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

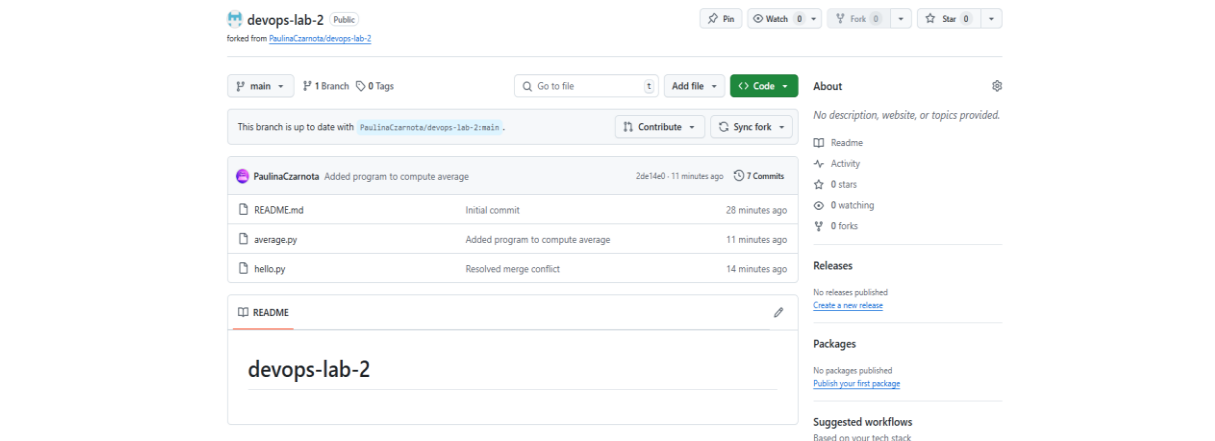
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git merge fast_forward_test --ff-only
Updating c502a2e..2de14e0
Fast-forward
 average.py | 3 +++
1 file changed, 3 insertions(+)
create mode 100644 average.py

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git push origin main
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/PaulinaCzarnota/devops-lab-2.git
 c502a2e..2de14e0  main -> main
```



## STEP 7: CREATING AND MERGING A PULL REQUEST

### 1. Forked the Repository Using a Second GitHub Account (Paulina-Test):





```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git config --global user.name "Paulina-Test"

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git config --global user.email "naruchan1410@gmail.com"

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git config --global --list
user.email=naruchan1410@gmail.com
user.name=Paulina-Test
core.editor="C:\Users\35389\AppData\Local\Programs\Microsoft VS Code\bin\code" --wait
filter.lfs.required=true
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
credential.helper=store

```

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git clone https://github.com/Paulina-Test/devops-lab-2.git
Cloning into 'devops-lab-2'...
remote: Enumerating objects: 21, done.
remote: Counting objects: 100% (21/21), done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 21 (delta 1), reused 17 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (21/21), done.
Resolving deltas: 100% (1/1), done.

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ cd devops-lab-2

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2/devops-lab-2 (main)
$

```

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2/devops-lab-2 (main)
$ nano average.py

```

## 2. Modified average.py to Add Min and Max Values:

 MINGW64:/c/Users/35389/devops-lab-2/devops-lab-2

GNU nano 8.2	average.py
<pre> numbers = list(map(int, input("Enter numbers separated by spaces: ").split())) avg = sum(numbers) / len(numbers) print("Average:", avg) print("Maximum:", max(numbers)) print("Minimum:", min(numbers)) </pre>	

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2/devops-lab-2 (main)
$ git commit -m "Updated average program to display min and max"
[main e8acef1] Updated average program to display min and max
1 file changed, 3 insertions(+)

```

```

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2/devops-lab-2 (main)
$ git remote set-url origin https://ghp_rbhqZh2APQ71zKS8YvbqWcn0zqdqlg2lB0uB@github.com/Paulina-Test/devops-lab-2.git

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2/devops-lab-2 (main)
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 409 bytes | 409.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Paulina-Test/devops-lab-2.git
2de14e0..e8acef1 main -> main

```

### 3. Merged the Pull Request in Main Account (PaulinaCzarnota):



#### Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#) or [learn more about diff comparisons](#).

base repository: PaulinaCzarnota/devops-lab-2 base: main head repository: Paulina-Test/devops-lab-2 compare: main

✓ Able to merge. These branches can be automatically merged.



Add a title

Updated average.py to include min and max values

Helpful resources

[GitHub Community Guidelines](#)

Add a description

Write Preview H B I

Added functionality to compute the minimum and maximum values alongside the average.

Markdown is supported Paste, drop, or click to add files

☒ Allow edits by maintainers

Create pull request



#### Updated average.py to include min and max values #1

Edit < Code

Open Paulina-Test wants to merge 1 commit into PaulinaCzarnota:main from Paulina-Test:main

Conversation 0 Commits 1 Checks 0 Files changed 1 +3 -0



Paulina-Test commented in 1 minute

Added functionality to compute the minimum and maximum values alongside the average.

Reviewers

No reviews

Still in progress? [Convert to draft](#)

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

None yet

Notifications

Customize

Unsubscribe



Updated average program to display min and max

e8acef1



This branch has no conflicts with the base branch

Only those with [write access](#) to this repository can merge pull requests.

[Try the new merge experience](#)



Add a comment

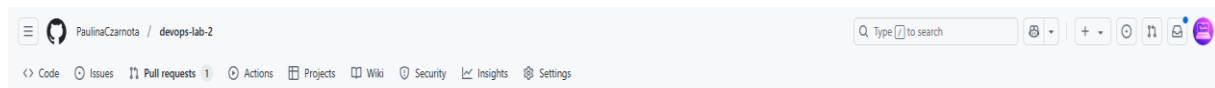
Write Preview H B I

Add your comment here...

Markdown is supported Paste, drop, or click to add files

Close pull request

Comment



Label issues and pull requests for new contributors

[Dismiss](#)

Now, GitHub will help potential first-time contributors [discover issues](#) labeled with [good first issue](#)

Filters is:pr is:open

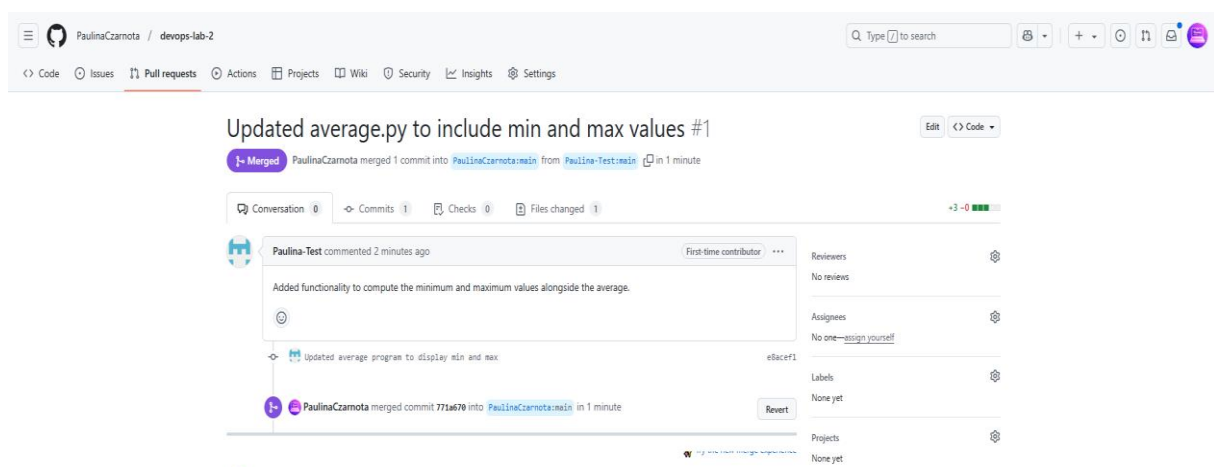
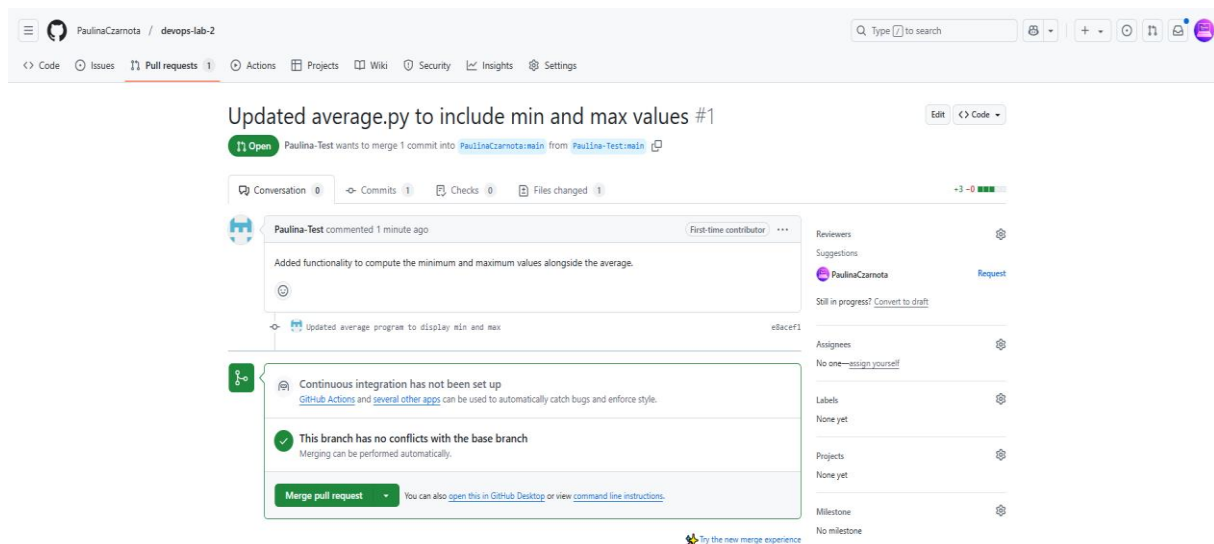
Labels 9

Milestones 0

New pull request

<input type="checkbox"/>	1 Open ✓ 0 Closed	Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	Updated average.py to include min and max values							
	#1 opened 1 minute ago by Paulina-Test							

[ProTip!](#) Type [g](#) on any issue or pull request to go back to the pull request listing page.



## STEP 8: PULLING THE MERGED CHANGES TO LOCAL MACHINE

```
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2/devops-lab-2 (main)
$ cd ~/devops-lab-2

Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ git pull origin main
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 1), reused 3 (delta 1), pack-reused 0 (from 0)
Unpacking objects: 100% (4/4), 1.27 KiB | 36.00 KiB/s, done.
From https://github.com/PaulinaCzarnota/devops-lab-2
* branch          main       -> FETCH_HEAD
   2de14e0..771a670 main       -> origin/main
Updating 2de14e0..771a670
Fast-forward
 average.py | 3 +++
 1 file changed, 3 insertions(+)
```

```
Paulina@LAPTOP-Paulina MINGW64 ~/devops-lab-2 (main)
$ cat average.py
numbers = list(map(int, input("Enter numbers separated by spaces: ").split()))
avg = sum(numbers) / len(numbers)
print("Average:", avg)
print("Maximum:", max(numbers))
print("Minimum:", min(numbers))
```

PaulinaCzarnota / devops-lab-2

Q

Type  to search

+

<> Code

Issues

**Pull requests**

Actions

Projects

Security

Insights

Back to notifications

Done

Unsubscribe

Mark as unread

Save

X

## Updated average.py to include min and max values #1

**Merged** PaulinaCzarnota merged 1 commit into [PaulinaCzarnota:main](#) from [Paulina-Test:main](#) 3 minutes ago

Conversation 0 Commits 1 Checks 0 Files changed 1 +3 -0

Changes from all commits File filter Conversations Jump to 0 / 1 files viewed Review in codespace Review changes

average.py

```
... @@ -1,3 +1,6 @@
1 numbers = list(map(int, input("Enter numbers separated by spaces: ").split()))
2 avg = sum(numbers) / len(numbers)
3 print("Average:", avg)
4 + print("Maximum:", max(numbers))
5 + print("Minimum:", min(numbers))
6 +
```

## COMMIT HISTORY

PaulinaCzarnota / devops-lab-2

Q

Type  to search

+

<> Code

Issues

Pull requests

Actions

Projects

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Settings

### Commits

main	All users	All time
Commits on Feb 15, 2025		
Merge pull request #1 from Paulina-Test/main	Verified 771a678	
PaulinaCzarnota authored 1 hour ago		
Updated average program to display min and max	e8acef1	
Paulina-Test committed 1 hour ago		
Added program to compute average	2de14e8	
PaulinaCzarnota committed 2 hours ago		
Resolved merge conflict	c582a2e	
PaulinaCzarnota committed 2 hours ago		
Modified greeting again	928ac8f	
PaulinaCzarnota committed 2 hours ago		
Changed greeting to Welcome	f58ae59	
PaulinaCzarnota committed 2 hours ago		
Updated program to print numbers 1-10	94e3c9a	
PaulinaCzarnota committed 2 hours ago		
Added Hello World program	88b8868	
PaulinaCzarnota committed 2 hours ago		
Initial commit	Verified 2195685	
PaulinaCzarnota authored 2 hours ago		