

राश्मिCTF

CHALLENGE NAME : [REPO RIDDLES]

DEV : [ADITYA JASORIYA]

CATEGORY : [DIGITAL FORENSICS]

LEVEL : [MEDIUM]



2024

In this Challenge we are provided with a .git folder. This folder defines that the folder is a git repo. Git is a powerful tool which enables us to work on a big project while keeping the track of all the changes. So, in this challenge we are supposed to get back to all the commits and branches and dig the folder deeply. For this git status, git log, git branch, git checkout <branch_name>, git reset --hard <commit_point>, These commands are enough to get to all the history and get all the files where flags is been hidden. The flag is hidden as a string by breaking it into multiple parts with the help of string slicing. Below are the screenshots for the same →

Viewing logs of branch master.

```
aditya@LAPTOP MINGW64 ~/OneDrive/Desktop/CTF/Repo Riddles (master)
$ git log
commit 9370bf54bc070fa53c5f2b8b14834db8ed7f3e79 (HEAD -> master)
Author: Aditya01229 <adityajasoriya2003@gmail.com>
Date: Sun Mar 3 08:54:52 2024 +0530

    last commit

commit ebf967130d550a180f7e3fda47a5ca96bb442c81
Author: Aditya01229 <adityajasoriya2003@gmail.com>
Date: Sun Mar 3 08:54:23 2024 +0530

    second last commit

commit aa3306a61a6dc2b4b1fe97ede91c5c843d452c58
Author: Aditya01229 <adityajasoriya2003@gmail.com>
Date: Sun Mar 3 08:34:07 2024 +0530

    Initial Commit
```

Going to the last commit of branch master to see the old files.

```
aditya@LAPTOP MINGW64 ~/OneDrive/Desktop/CTF/Repo Riddles (master)
$ git reset --hard ebf967130d550a180f7e3fda47a5ca96bb442c81
HEAD is now at ebf9671 second last commit
```

The Image got there.

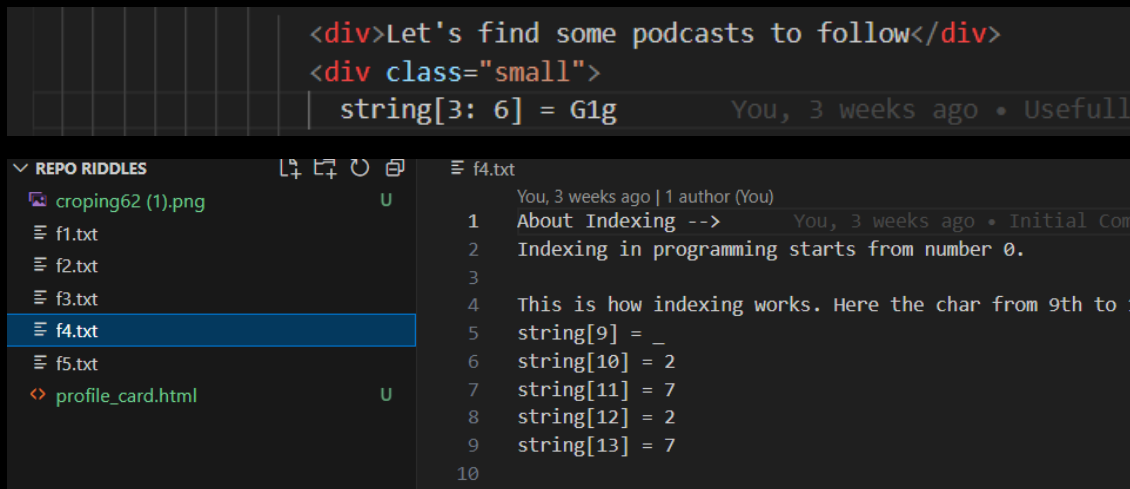
String[6:9] = ger

Going to branch 2.

```
aditya@LAPTOP MINGW64 ~/OneDrive/Desktop/CTF/Repo Riddles (master)
$ git branch
 2
 3
* master

aditya@LAPTOP MINGW64 ~/OneDrive/Desktop/CTF/Repo Riddles (master)
$ git checkout 2
Switched to branch '2'
```

Again after checking out the commits. This are the screenshots of files got with the data.



The screenshot shows a code editor with two files open. The top file contains HTML code: `<div>Let's find some podcasts to follow</div>` and `<div class="small">`. The bottom file, `f4.txt`, contains a list of items with their indices: `string[3: 6] = G1g`, `string[9] = _`, `string[10] = 2`, `string[11] = 7`, `string[12] = 2`, and `string[13] = 7`. The file explorer on the left shows the repository structure, including `cropping62 (1).png`, `f1.txt`, `f2.txt`, `f3.txt`, `f4.txt`, `f5.txt`, and `profile_card.html`.

Switching to branch 3 and viewing the logs of branch 3 →

```
aditya@LAPTOP MINGW64 ~/Downloads/LearningGit/LearningGit (master)
$ git checkout 3
Switched to branch '3'

aditya@LAPTOP MINGW64 ~/Downloads/LearningGit/LearningGit (3)
$ git log
commit 57f66532b0c6403f95dcfaffa0650f28850d6922 (HEAD -> 3)
Author: Aditya01229 <adityajasoriya2003@gmail.com>
Date: Sun Mar 3 08:43:49 2024 +0530

    string[0] = G string[1] = 1 string[2] = t
```

So we got all the indexes value of the string.

The string after combining all the parts → G1tG1gger_2727

Putting this in proper flag format → VishwaCTF{G1tG1gger_2727}

This is the required flag.

Tip → GitLens is a free, open-source extension for Visual Studio Code that provides enhanced Git integration within the code editor. Using this extracting data becomes easier. Which helps in managing complex git repo easily.