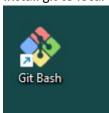
1. Install git to local PC https://git-scm.com/download/win



2. Register in github https://github.com/



3. Solve 13 topics from githowto https://githowto.com/ru

```
git config --list

diff.astextplain.textconv=astextplain

filter.lfs.clean=git-lfs clean -- %f

filter.lfs.smudge=git-lfs smudge -- %f

filter.lfs.process=git-lfs filter-process

filter.lfs.required=true

http.sslbackend=openssl

http.sslcainfo=C:/Program Files/Git/mingw64/etc/ssl/certs/ca-bundle.cr

t

core.autocrlf=true

core.fscache=true

core.symlinks=false

pull.rebase=false

credential.helper=manager

credential.https://dev.azure.com.usehttppath=true

init.defaultbranch=master

user.name=Rakhmetolla Miras Askhatuly

user.email=r.miras.work@gmail.com

core.safecrlf=warn
```

Task 2. Creating new project

```
移 MINGW64:/c/Users/User/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1
 ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2
$ mkdir work1
 JSER@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works (main)
 Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ touch hello.html
 |ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ echo Hello, World > hello.html
 ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git init
Initialized empty Git repository in C:/Users/User/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/w
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (master)
$ git add hello.html
warning: in the working copy of 'hello.html', LF will be replaced by CRLF the next time Git touc
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (master)
git commit -m "GITow"
[master (root-commit) 0049c69] GITow
1 file changed, 1 insertion(+)
create mode 100644 hello.html
 ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (master)
    Имя
                                                          Дата изменения
                                                                                         Тип
                                                                                                                   Размер
  nello 🎅
                                                          15.01.2025 9:20
                                                                                                                             1 KB
                                                                                         Microsoft Edge H...
```

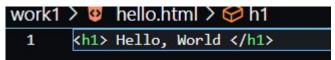
Task 3. Check status

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (master)
$ git status
on branch master
nothing to commit, working tree clean

User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (master)
$ git branch -m master main

User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$
```

Task 4. Make changes



Task 5. Indexation changes

Task 6. Indexation and commit

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git add hello.html

User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git commit -m "empty changing"
[main d7427aa] empty changing
1 file changed, 1 insertion(+), 1 deletion(-)

User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ |
```

Task 7. Change of commit

```
work1 > ♥ hello.html > ♥ h2

1 ⟨h2> Hello, World! I am Miras and todays day is great </h2>
```

```
MINGW64:/c/Users/User/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.

# On branch main
# Changes to be committed:
# modified: hello.html
```

```
MINGW64:/c/Users/User/Desktop/kbtu/pp2/Miras Rakh
changin content and format
# with '#' will be ignored, and an empty
# Changes to be committed:
        modified:
.git/commIT_EDITMSG[+] [unix] (10:23 15/
:wq
|USER@DESK10P-KQ88F/2 M1NGW64 ~/Desktop/KDTU/pp2/M1ras Raknmeto||| PP2
$ git status
On branch main
nothing to commit, working tree clean
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
```

Task 8. Changes, not file

```
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work
1 (main)
5 git add hello.html
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work
1 (main)
$ git status
On branch main
Changes to be committed:
   (use "git restore --staged <file>..." to unstage)
        modified: hello.html

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: hello.html

User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work
1 (main)
```

```
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work
 (main)
$ git commit -m "added standard HTML page tags"
[main c0726c8] added standard HTML page tags
1 file changed, 5 insertions(+), 1 deletion(-)
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ 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: hello.html
no changes added to commit (use "git add" and/or "git commit -a")
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git add .
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
§ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified: hello.html
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
S git commit -m "added html header"
[main d8227f6] added html header
1 file changed, 5 insertions(+), 3 deletions(-)
ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla P
$ git log
commit d8227f6634a8084a88ce30829e4899ecd3cc3d7c (HEAD -> main)
Author: Rakhmetolla Miras Askhatuly <r.miras.work@gmail.com>
Date:
       Thu Jan 16 10:52:20 2025 +0500
    added html header
commit c0726c875981d21b986e34d389f4421024a02fd9
Author: Rakhmetolla Miras Askhatuly <r.miras.work@gmail.com>
       Thu Jan 16 10:51:13 2025 +0500
    added standard HTML page tags
  mit 5be7c4f5b2cfa985d4a33233b13a252f24fdf99d
Author: Rakhmetolla Miras Askhatuly <r.miras.work@gmail.com>
       Wed Jan 15 10:23:09 2025 +0500
Date:
    changin content and format
commit d7427aa4ef518860e4b63bd2e6683d62f3f4eb76
Author: Rakhmetolla Miras Askhatuly <r.miras.work@gmail.com>
       Wed Jan 15 09:48:25 2025 +0500
    empty changing
commit 0049c6957b1b3774ed7fa41aa4cb3df77c08ec28
Author: Rakhmetolla Miras Askhatuly <r.miras.work@gmail.com>
       Wed Jan 15 09:21:54 2025 +0500
Date:
    GITOW
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git log --pretty=oneline
d8227f6634a8084a88ce30829e4899ecd3cc3d7c (HEAD -> main) added html header
c0726c875981d21b986e34d389f4421024a02fd9 added standard HTML page tags
5be7c4f5b2cfa985d4a33233b13a252f24fdf99d changin content and format
d7427aa4ef518860e4b63bd2e6683d62f3f4eb76 empty changing
0049c6957b1b3774ed7fa41aa4cb3df77c08ec28 GITow
```

```
git log --oneline --max-count=2
git log --oneline --since="5 minutes ago"
git log --oneline --until="5 minutes ago"
git log --oneline --author="Your Name"
git log --oneline -all
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git log --all --pretty=format:"%h %cd %s (%an)" --since="7 days ago"
d8227f6 Thu Jan 16 10:52:20 2025 +0500 added html header (Rakhmetolla Miras Askhatuly)
c0726c8 Thu Jan 16 10:51:13 2025 +0500 added standard HTML page tags (Rakhmetolla Miras Askhatu
5be7c4f Wed Jan 15 10:23:09 2025 +0500 changin content and format (Rakhmetolla Miras Askhatuly)
d7427aa Wed Jan 15 09:48:25 2025 +0500 empty changing (Rakhmetolla Miras Askhatuly)
0049c69 Wed Jan 15 09:21:54 2025 +0500 GITow (Rakhmetolla Miras Askhatuly)
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)

$ git log --all --pretty=format:"%h | %ad | %cd | %s%d [%an]" --date=short
d8227f6 | 2025-01-16 | 2025-01-16 | added html header (HEAD -> main) [Rakhmetolla Miras Askhatuly
c0726c8 | 2025-01-16 | 2025-01-16 | added standard HTML page tags [Rakhmetolla Miras Askhatuly]
5be7c4f | 2025-01-15 | 2025-01-15 | changin content and format [Rakhmetolla Miras Askhatuly]
d7427aa | 2025-01-15 | 2025-01-15 | empty changing [Rakhmetolla Miras Askhatuly]
0049c69 | 2025-01-15 | 2025-01-15 | GITow [Rakhmetolla Miras Askhatuly]
```

- --pretty-"..." определяет формат вывода
- %h укороченный хэш коммита
- %ad дата коммита
- - визуал
- %s комментарий
- %d дополнение комита («головы» веток или теги»)
- %an имя автора
- --date=short сохраняет формат даты коротким и симпачным

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)

$ git config --global format.pretty '%h | %ad | %cd | %s%d [%an]'

User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)

$ git config --global log.date short
```

Task 10. Getting old versions

Previous HEAD position was 0049c69 GITow

Switched to branch 'main'

```
MINGW64:/c/Users/User/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
s git log
           2025-01-16 | 2025-01-16 | added html header (HEAD -> main) [Rakhmetolla Miras Askhatuly]
d8227f6 |
c0726c8 | 2025-01-16 | 2025-01-16 | added standard HTML page tags [Rakhmetolla Miras Askhatuly]
5be7c4f | 2025-01-15 | 2025-01-15 | changin content and format [Rakhmetolla Miras Askhatuly]
d7427aa | 2025-01-15 | 2025-01-15 | empty changing [Rakhmetolla Miras Askhatuly]
0049c69 | 2025-01-15 | 2025-01-15 | GITow [Rakhmetolla Miras Askhatuly]
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git checkout 0049c69
Note: switching to '0049c69'.
You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.
If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:
  git switch -c <new-branch-name>
Or undo this operation with:
  git switch -
Turn off this advice by setting config variable advice.detachedHead to false
HEAD is now at 0049c69 GITow
|ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((0049c69...))
 cat hello.html
Hello, World
 ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((0049c69...))
$ git switch main
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ cat hello.html
<html>
    <head>
    </head>
        <body>
            <h1> Hello, World! I am Miras and todays day is great </h1>
        </body>
 </html>
Task 11. Creating new tag versions
 User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
 $ git tag v1
 User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
 $ git log
 d8227f6 |
          2025-01-16 | 2025-01-16 |
                                     added html header (HEAD -> main, tag: v1) [Rakhmetolla Miras
```

```
c0726c8 | 2025-01-16 | 2025-01-16
5be7c4f | 2025-01-15 | 2025-01-15
d7427aa | 2025-01-15 | 2025-01-15
                                                       added standard HTML page tags [Rakhmetolla Miras Askhatuly]
                                    2025-01-16
                                                       changin content and format [Rakhmetolla Miras Askhatuly]
d7427aa | 2025-01-15 | 2025-01-15 | empty changing [Rakhmetolla Miras Askhatuly]
0049c69 | 2025-01-15 | 2025-01-15 | GITow [Rakhmetolla Miras Askhatuly]
                          MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git checkout v1^
Note: switching to 'v1A'.
You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.
If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:
  git switch -c <new-branch-name>
Or undo this operation with:
  git switch -
Turn off this advice by setting config variable advice detachedHead to false
HEAD is now at c0726c8 added standard HTML page tags
 |ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((c0726c8...))
$ git tag v1-beta
 |ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1-beta))
S git log

c0726c8 | 2025-01-16 | 2025-01-16 | added standard HTML page tags (HEAD, tag: v1-beta) [Rakhmetolla Miras Askhatuly]

5be7c4f | 2025-01-15 | 2025-01-15 | changin content and format [Rakhmetolla Miras Askhatuly]

d7427aa | 2025-01-15 | 2025-01-15 | empty changing [Rakhmetolla Miras Askhatuly]

0049c69 | 2025-01-15 | 2025-01-15 | GITow [Rakhmetolla Miras Askhatuly]
  ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1-beta))
 User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1-beta))
 $ git checkout v1
 Previous HEAD position was c0726c8 added standard HTML page tags
 HEAD is now at d8227f6 added html header
 Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1))
 $ git checkout v1-beta
 Previous HEAD position was d8227f6 added html header
 HEAD is now at c0726c8 added standard HTML page tags
```

```
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1-beta))
$ git tag
v1
v1-beta
```

```
| User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1-beta))
| git log main --all |
| d8227f6 | 2025-01-16 | 2025-01-16 | added html header (tag: v1, main) [Rakhmetolla Miras Askhatuly] |
| c0726c8 | 2025-01-16 | 2025-01-16 | added standard HTML page tags (HEAD, tag: v1-beta) [Rakhmetolla Miras Askhatuly] |
| 5be7c4f | 2025-01-15 | 2025-01-15 | changin content and format [Rakhmetolla Miras Askhatuly] |
| d7427aa | 2025-01-15 | 2025-01-15 | empty changing [Rakhmetolla Miras Askhatuly] |
| 0049c69 | 2025-01-15 | 2025-01-15 | GITow [Rakhmetolla Miras Askhatuly] |
```

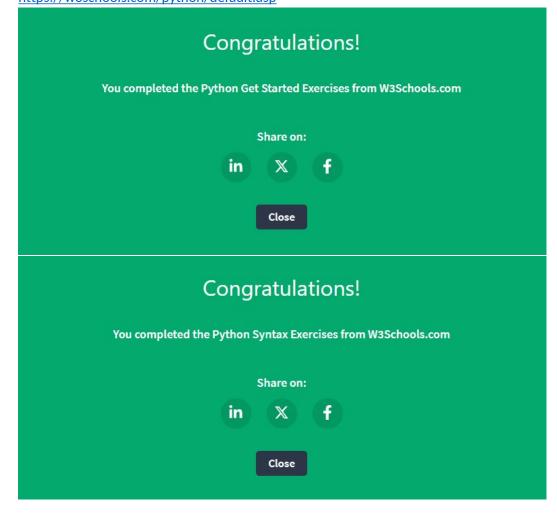
Task 12. Canceling local changes (before indexation)

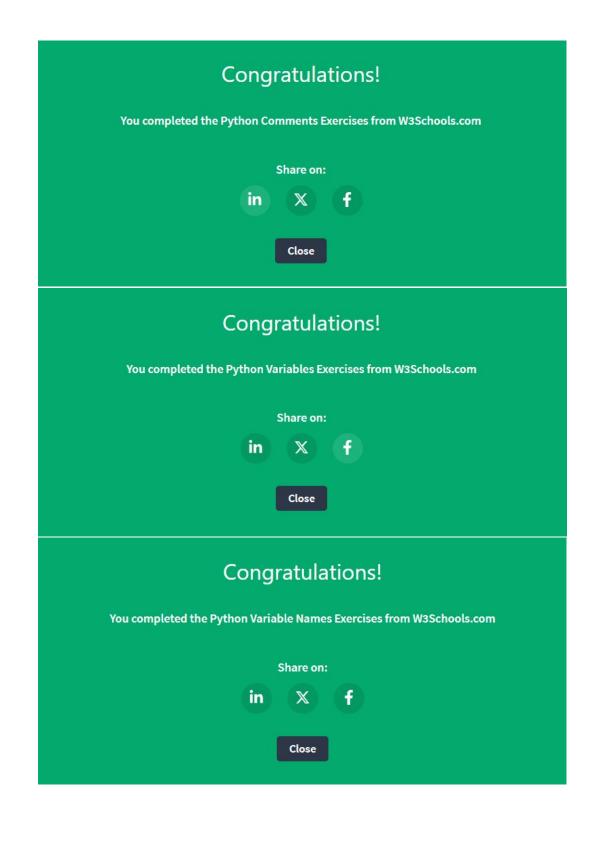
```
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 ((v1-beta))
$ git switch main
Previous HEAD position was c0726c8 added standard HTML page tags
Switched to branch 'main'
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git 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: hello.html
no changes added to commit (use "git add" and/or "git commit -a")
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git checkout hello.html
Updated 1 path from the index
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git status
On branch main
nothing to commit, working tree clean
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ cat hello.html
<html>
   <head>
    </head>
        <body>
           <h1> Hello, World! I am Miras and todays day is great </h1>
        </body>
</html>
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
```

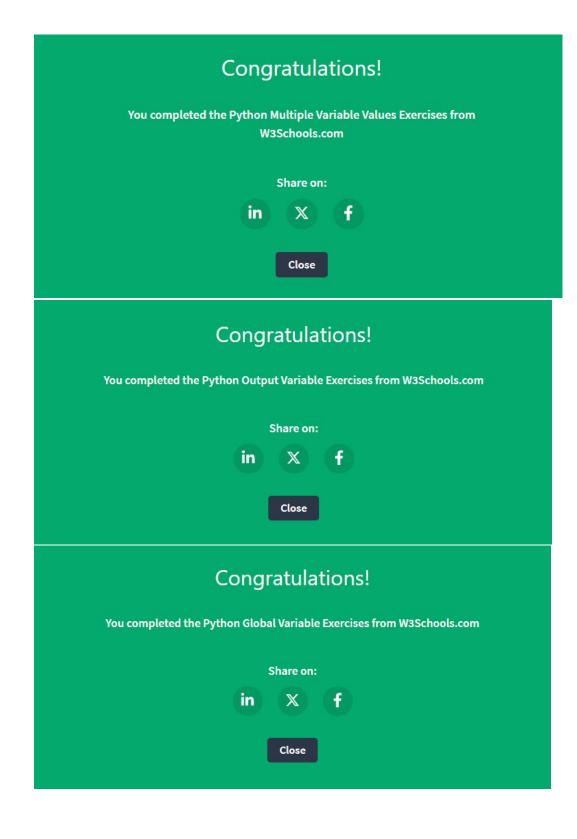
Task 13. Canceling after indexing change (before commit)

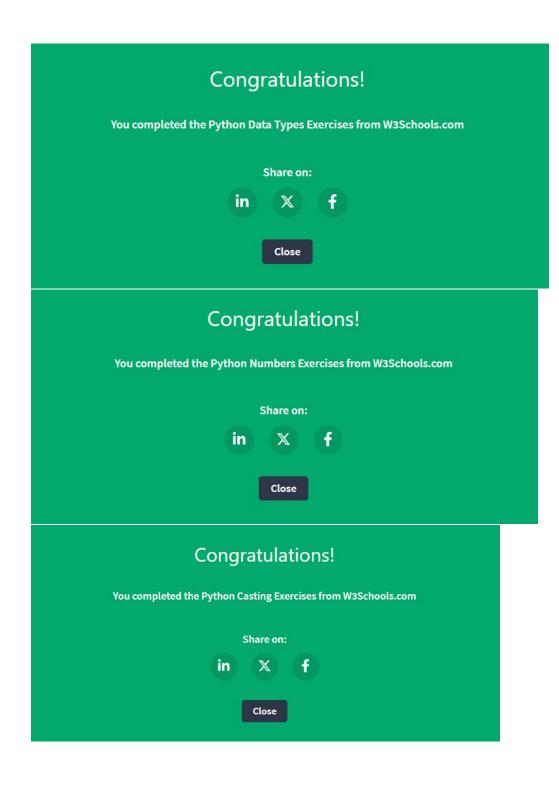
```
ser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git add hello.html
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git reset HEAD hello.html
Unstaged changes after reset:
       hello.html
User@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git checkout hello.html
Updated 1 path from the index
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
$ git status
On branch main
nothing to commit, working tree clean
Jser@DESKTOP-KQ88F72 MINGW64 ~/Desktop/kbtu/pp2/Miras Rakhmetolla PP2 works/work1 (main)
```

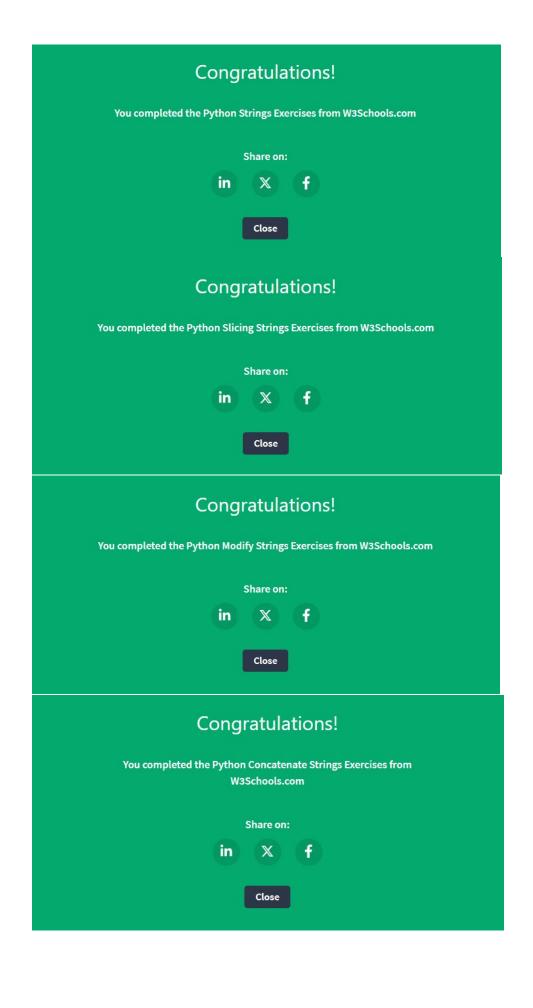
4. Read and make exervises from w3chool from: HOME to Python String https://w3schools.com/python/default.asp













5. All examples from articles save to your hithub account before deadline 1/16/2025: MirasRakhmetollaKBTU/pp2-2024-2025-spring-