

GIT LESSON 2

Task 1

a. You need to add some more changes in a file from your local repository and then to pass these changes to remote repo. What steps should you follow (reproduce this actions)?

```
MINGW64~/Users/bpelin/git_lesson/task2.v1
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 ((3569275...))
$ cd ..
bpe\in@ENA10951 MINGW64 ~/git_lesson (master)
$ mkdir task2.v1
bpe\in@ENA10951 MINGW64 ~/git_lesson (master)
$ cd task2.v1/
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git init
Initialized empty Git repository in C:/Users/bpelin/git_lesson/task2.v1/.git/
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ >test.txt
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ nano test.txt
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git add
warning: in the working copy of 'test.txt', LF will be replaced by CRLF the next time Git tou
ches it
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git commit -m "Create file"
[master (root-commit) 86c9efc] Create file
1 file changed, 1 insertion(+)
create mode 100644 test.txt
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git remote add origin https://github.com/malasivasea454/git_lesson-task2.git
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/malasivasea454/git_lesson-task2.git'
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 224 bytes | 224.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/malasivasea454/git_lesson-task2.git
 * [new branch] master -> master
branch 'master' set up to track 'origin/master'.
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git log --all --graph
* commit 86c9efc94a42decebe1126074d8ead60f0d1f9ab (HEAD -> master, origin/master)
  Author: Bogdan Pelin <Bogdan.Pelin@endava.com>
  Date: Wed May 3 21:01:54 2023 +0300
    Create file
bpe\in@ENA10951 MINGW64 ~/git_lesson/task2.v1 (master)
$ |
```

b. You have made a small mistake in the commit message or in a file within the previous commit which was pushed to remote and now you must make those minor corrections without "registering a new commit. How can you achieve that?

```
MINGW64/c/Users/bpelin/git_lesson/task2.v1
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ ls -l
total 1
-rw-r--r-- 1 bpelin 1049089 13 May  3 21:13 test.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ nano test.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git add .

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git commit --amend
[master ff5af57] Create file name- test.txt
Date: Wed May 3 21:01:54 2023 +0300
1 file changed, 2 insertions(+)
create mode 100644 test.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git push --force
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 262 bytes | 262.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/malasiavasea454/git_lesson-task2.git
+ 86c9efc...ff5af57 master -> master (forced update)

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ |
```



```
MINGW64/c/Users/bpelin/git_lesson/task2.v1
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ ls -l
total 1
drwxr-xr-x 1 bpelin 1049089  0 May  3 21:22 configurations/
-rw-r--r-- 1 bpelin 1049089 42 May  3 21:14 test.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ echo "configurations/" >> .gitignore

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ >ignore_test_file.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ mv ignore_test_file.txt configurations/

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ cd configurations/

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1/configurations (master)
$ ls -l
total 0
-rw-r--r-- 1 bpelin 1049089  0 May  3 21:28 ignore_test_file.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1/configurations (master)
$ cd ..

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore

nothing added to commit but untracked files present (use "git add" to track)

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$
```

2. You are a new joiner in a developing team, and in order to start working you need to recreate the project's remote repository to your working station. What will be your actions?

```
MINGW64/c/Users/bpelin/git_lesson/task2.v2/git_lesson-task2
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v1 (master)
$ cd ..

bpelin@EN410951 MINGW64 ~/git_lesson (master)
$ mkdir task2.v2

bpelin@EN410951 MINGW64 ~/git_lesson (master)
$ cd task2.v2/

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2 (master)
$ git clone https://github.com/malasiavasea454/git_lesson-task2.git
Cloning into 'git_lesson-task2'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2 (master)
$ ls -l
total 0
drwxr-xr-x 1 bpelin 1049089 0 May  3 21:46 git_lesson-task2/

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2 (master)
$ cd git_lesson-task2/

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2/git_lesson-task2 (master)
$ ls -l
total 1
-rw-r--r-- 1 bpelin 1049089 42 May  3 21:46 test.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2/git_lesson-task2 (master)
$
```

3. As a new joiner, you just started to work on a project which is using Git and follows a classic branching strategy. You have cloned the remote repo to a local one and need to start to work on a task. What will be your first actions?

```
MINGW64/c/Users/bpelin/git_lesson/task2.v3
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2/git_lesson-task2 (master)
$ cd ..
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v2 (master)
$ cd ..
bpelin@EN410951 MINGW64 ~/git_lesson (master)
$ mkdir task2.v3
bash: mkdir: command not found
bpelin@EN410951 MINGW64 ~/git_lesson (master)
$ mkdir task2.v3
bpelin@EN410951 MINGW64 ~/git_lesson (master)
$ cd task2.v3/
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git clone https://github.com/malasiavasea454/git_lesson-task2.git
Cloning into 'git_lesson-task2'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git branch -a
* master
  remotes/origin/HEAD -> origin/master
  remotes/origin/master
  remotes/origin/my-feature-branch
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git checkout -b 1234
Switched to a new branch '1234'
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ > test3.txt
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ git add .
warning: adding embedded git repository: task2.v3/git_lesson-task2
hint: you've added another git repository inside your current repository.
hint: clones of the outer repository will not contain the contents of
hint: the embedded repository and will not know how to obtain it.
hint: if you meant to add a submodule, use:
hint:
hint:   git submodule add <url> task2.v3/git_lesson-task2
hint:
hint: if you added this path by mistake, you can remove it from the
hint: index with:
hint:
hint:   git rm --cached task2.v3/git_lesson-task2
hint:
hint: See "git help submodule" for more information.
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ ^C
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ ls -al
total 4
drwxr-xr-x 1 bpelin 1049089 0 May  3 21:53 ./
drwxr-xr-x 1 bpelin 1049089 0 May  3 21:47 ../
```

```
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ ls -al
total 4
drwxr-xr-x 1 bpelin 1049089 0 May  3 21:53 ./
drwxr-xr-x 1 bpelin 1049089 0 May  3 21:47 ../
drwxr-xr-x 1 bpelin 1049089 0 May  3 21:50 git_lesson-task2/
-rw-r--r-- 1 bpelin 1049089 0 May  3 21:53 test3.txt
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ git add test3.txt
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ git commit -m "Exercise 3"
[1234 384ece4] Exercise 3
2 files changed, 1 insertion(+)
create mode 160000 task2.v3/git_lesson-task2
create mode 100644 task2.v3/test3.txt
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ git status
On branch 1234
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ../task1.v1/
    ../task1/
    ../task2.v1/
    ../task2.v2/

nothing added to commit but untracked files present (use "git add" to track)
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ git push origin 1234
Enumerating objects: 23, done.
Counting objects: 100% (23/23), done.
Delta compression using up to 8 threads
Compressing objects: 100% (14/14), done.
Writing objects: 100% (23/23), 2.36 KiB | 2.36 MiB/s, done.
Total 23 (delta 4), reused 13 (delta 1), pack-reused 0
remote: Resolving deltas: 100% (4/4), done.
remote: This repository moved. Please use the new location:
remote:   https://github.com/malasiavasea454/git_lesson-task2.git
remote:
remote: Create a pull request for '1234' on GitHub by visiting:
remote:   https://github.com/malasiavasea454/git_lesson-task2/pull/new/1234
remote:
To https://github.com/malasiavasea454/git_lesson.git
 * [new branch]      1234 -> 1234
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$
```

4. You are actively working on a new implementation on a branch called feature. You are asked to perform a bug fix and deliver it as soon as possible. Your actions?

```
MINGW64/c/Users/bpelin/git_lesson/task2.v3

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (1234)
$ git checkout master
warning: unable to rmdir 'task2.v3/git_lesson-task2': Directory not empty
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git pull origin master
fatal: 'origin' does not appear to be a git repository
fatal: could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git pull origin master
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 242 bytes | 34.00 KiB/s, done.
From https://github.com/malasiavasea454/git_lesson
* branch      master      -> FETCH_HEAD
+ e200f9f...ff5af57 master -> origin/master (forced update)
fatal: refusing to merge unrelated histories

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git checkout feature1
error: pathspec 'feature1' did not match any file(s) known to git

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git checkout -b feature1
Switched to a new branch 'feature1'

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ >bugfix.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git commit -m "Bug fix : task4"
git: 'Commit' is not a git command. See 'git --help'.

The most similar command is
    commit

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git pull origin master^C

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git add bugfix.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git commit -m "Bug fix : task4"
[feature1 fb431aa] Bug fix : task4
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 task2.v3/bugfix.txt

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git push origin feature1
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 321 bytes | 321.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git push origin feature1
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 321 bytes | 321.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote: This repository moved. Please use the new location:
remote:   https://github.com/malasiavasea454/git_lesson-task2.git
remote:
remote: Create a pull request for 'feature1' on GitHub by visiting:
remote:   https://github.com/malasiavasea454/git_lesson-task2/pull/new/Feature1
remote:
to https://github.com/malasiavasea454/git_lesson.git
* [new branch]      feature1 -> feature1

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (feature1)
$ git checkout master
Switched to branch 'master'
Your branch and 'origin/master' have diverged,
and have 2 and 1 different commits each, respectively.
(use 'git pull' to merge the remote branch into yours)

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git merge feature1
Updating e200f9f..fb431aa
Fast-forward
 task2.v3/bugfix.txt | 0
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 task2.v3/bugfix.txt
```

```
bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git pull
fatal: refusing to merge unrelated histories

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git pull --rebase
bash: '$'\302\203git': command not found

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git pull --rebase
Successfully rebased and updated refs/heads/master.

bpelin@EN410951 MINGW64 ~/git_lesson/task2.v3 (master)
$ git push origin master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 336 bytes | 336.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
remote: This repository moved. Please use the new location:
remote:   https://github.com/malasiavasea454/git_lesson-task2.git
To https://github.com/malasiavasea454/git_lesson.git
   ff5af57..12ccf59  master -> master
```