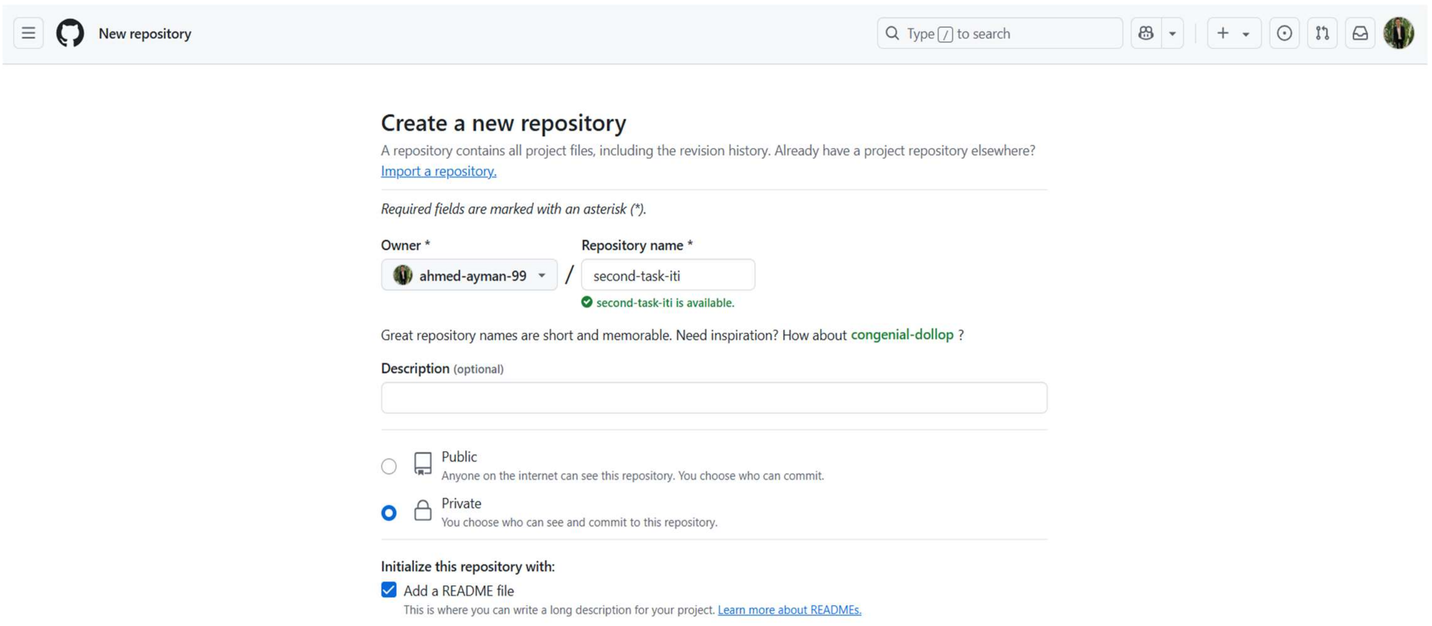
Git & GitHub Task

Second Task

- **Create Repo:**


New repository

Type / to search

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Required fields are marked with an asterisk (*).

Owner * ahmed-ayman-99 / Repository name * second-task-iti

second-task-iti is available.

Great repository names are short and memorable. Need inspiration? How about congenial-dollop ?

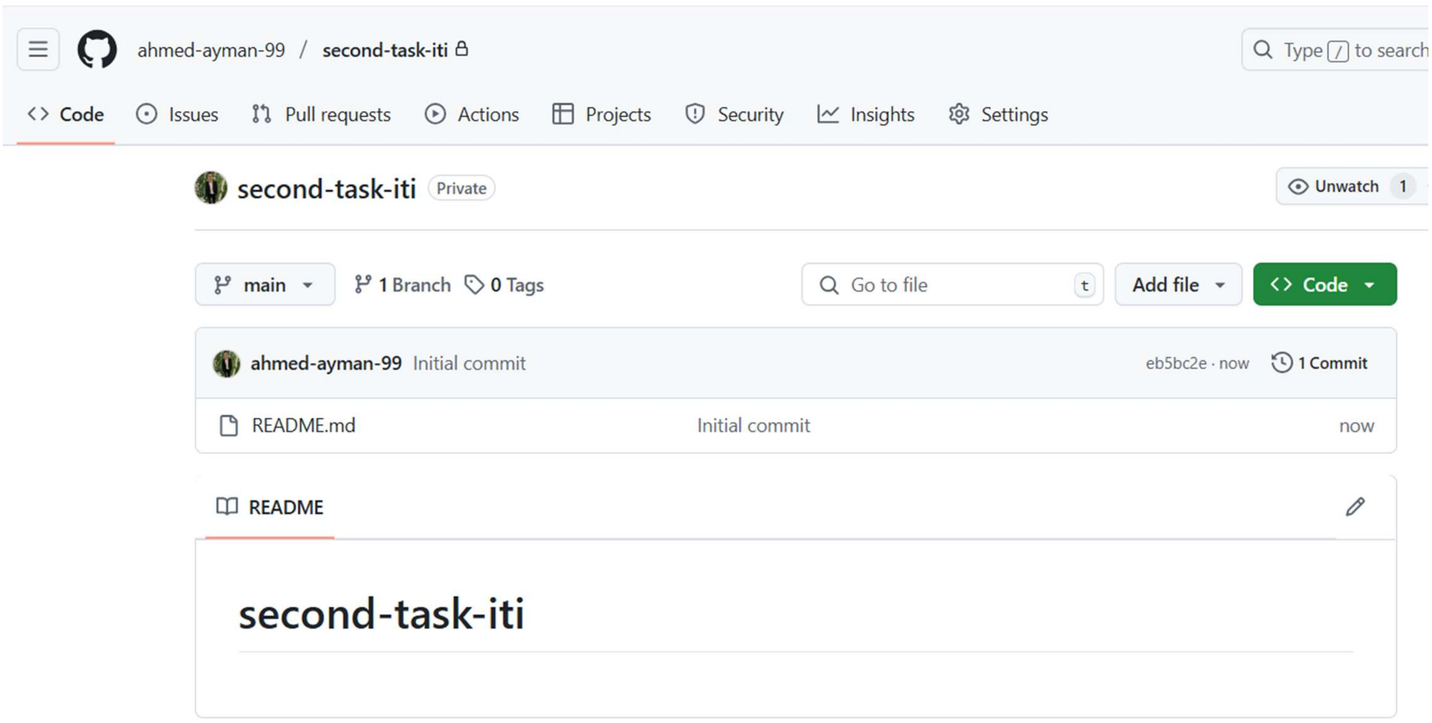
Description (optional)

Public
Anyone on the internet can see this repository. You choose who can commit.

[✓ Private]
You choose who can see and commit to this repository.

Initialize this repository with:

[✓] Add a README file
This is where you can write a long description for your project. Learn more about READMEs.


ahmed-ayman-99 / second-task-iti

Code | Issues | Pull requests | Actions | Projects | Security | Insights | Settings

second-task-iti Private

Unwatch 1

main | 1 Branch | 0 Tags | Go to file | Add file | Code

ahmed-ayman-99 Initial commit — eb5bc2e · now — 1 Commit

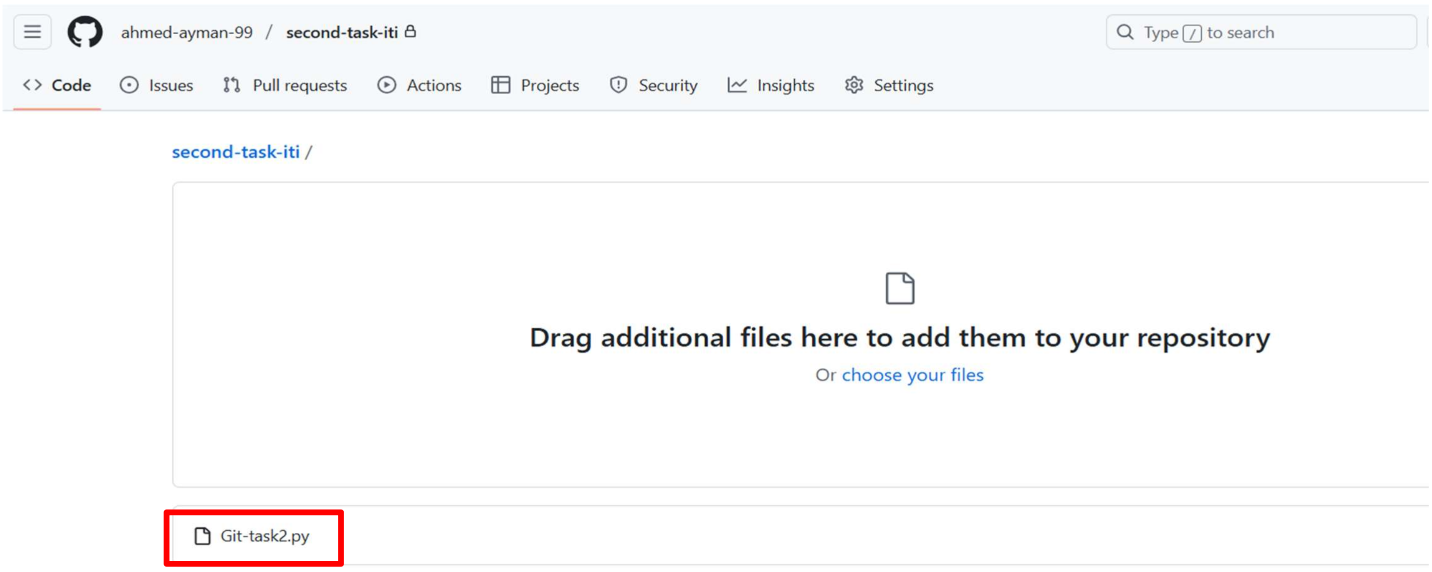
README.md	Initial commit	now

README

second-task-iti

Link Repo: ahmed-ayman-99/second-task-iti

- **upload empty python file to repo:**

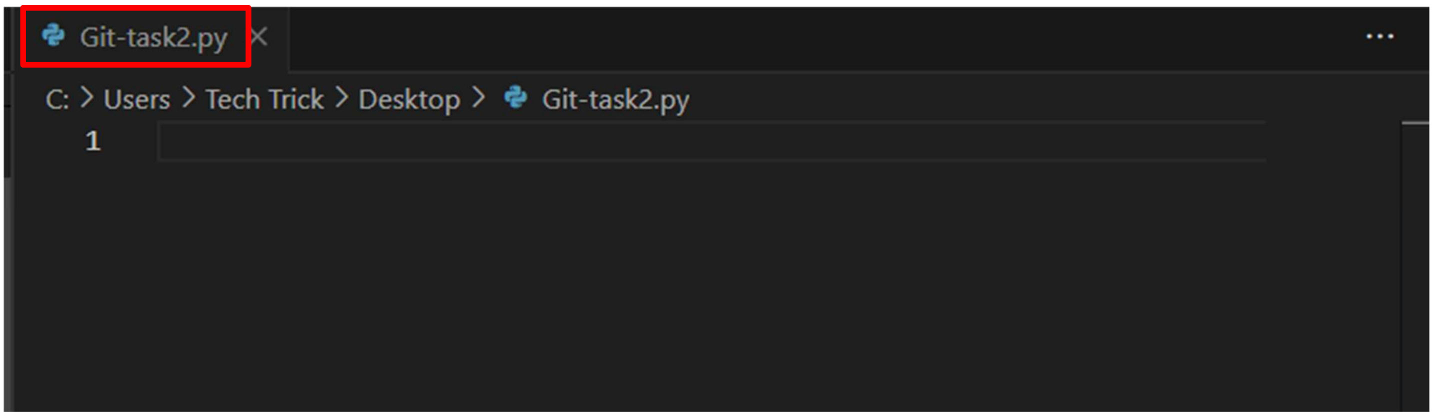


second-task-iti /

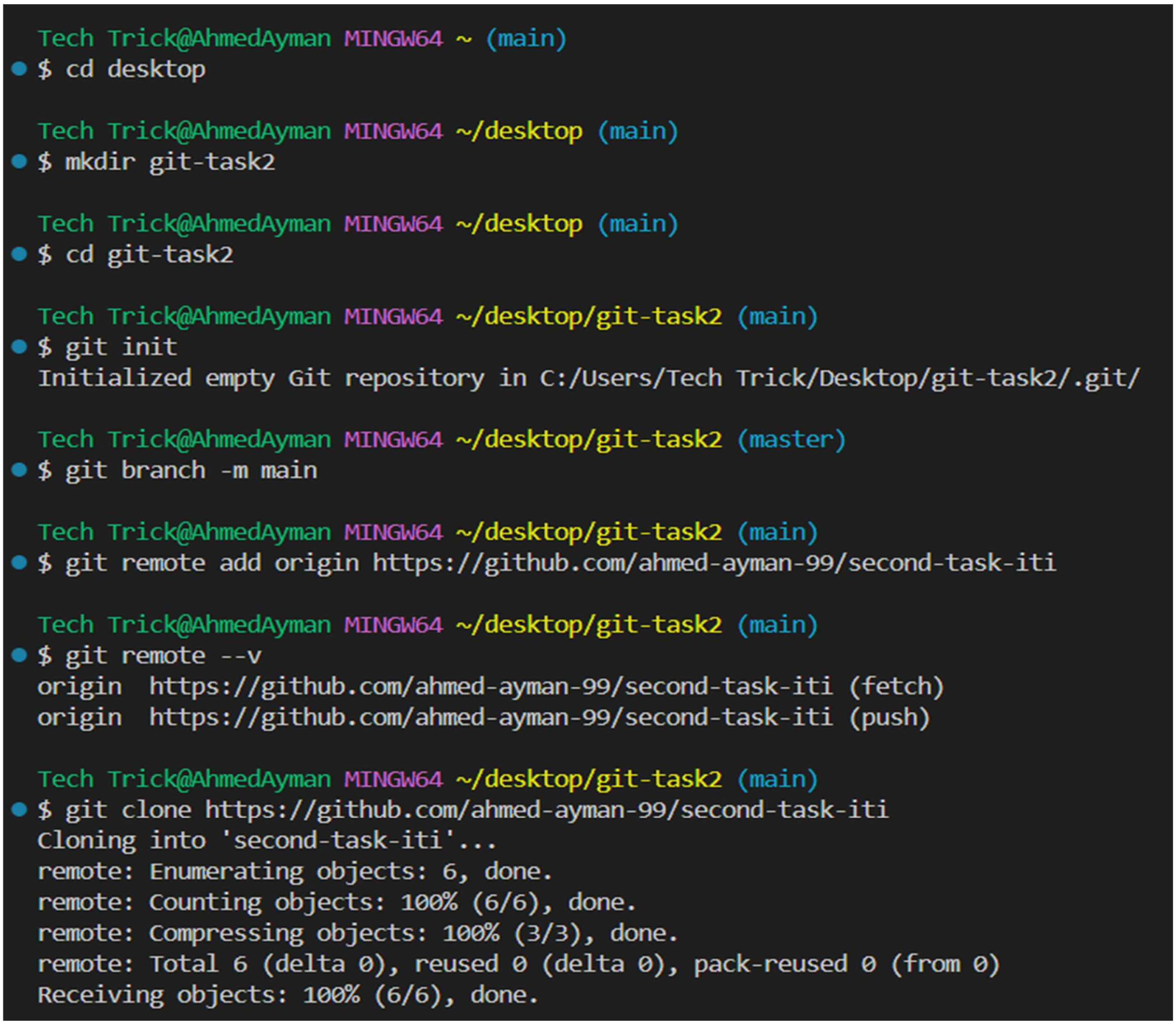
Drag additional files here to add them to your repository

Or choose your files

Git-task2.py

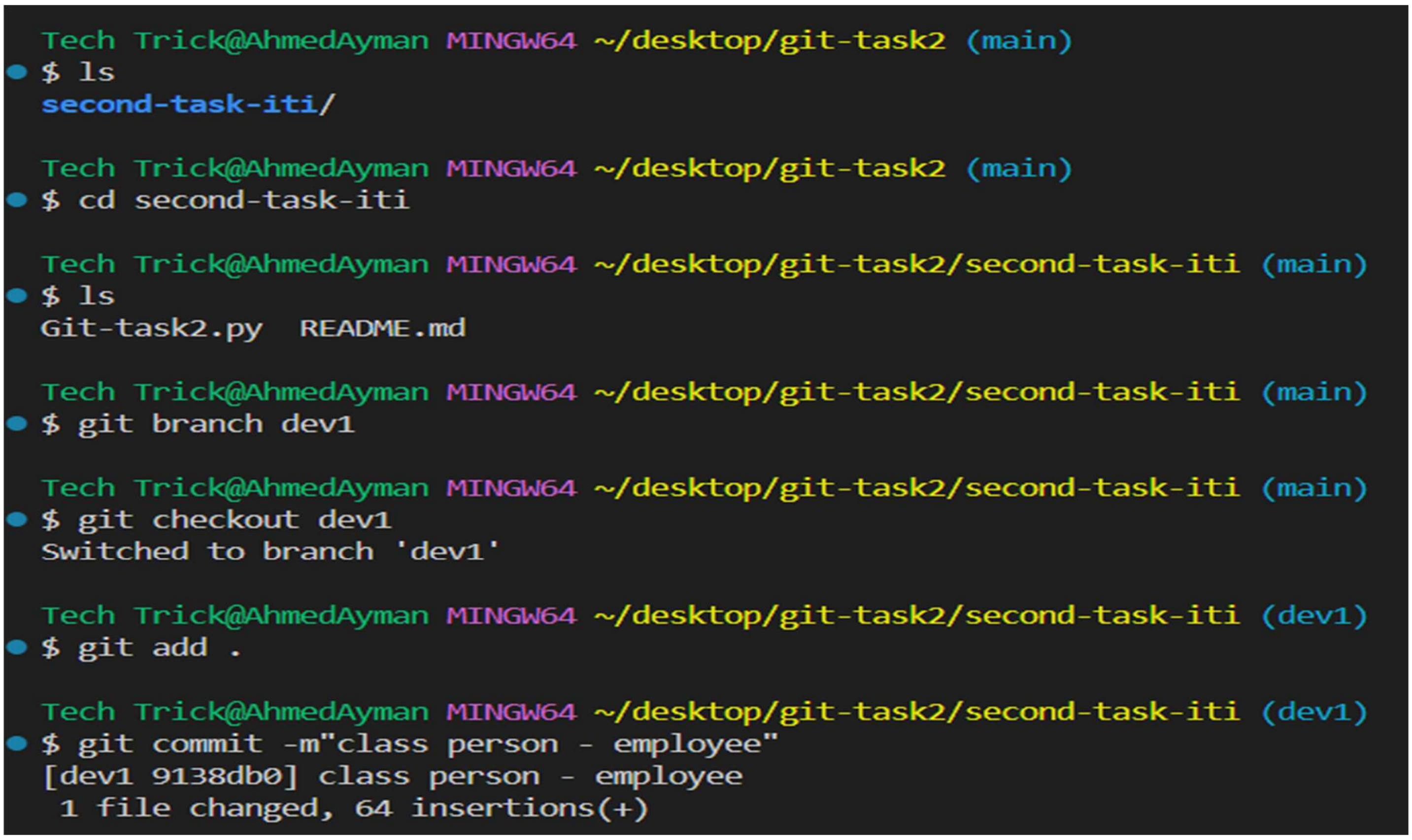


- **Open Gitbash and start initialize and cloning:**



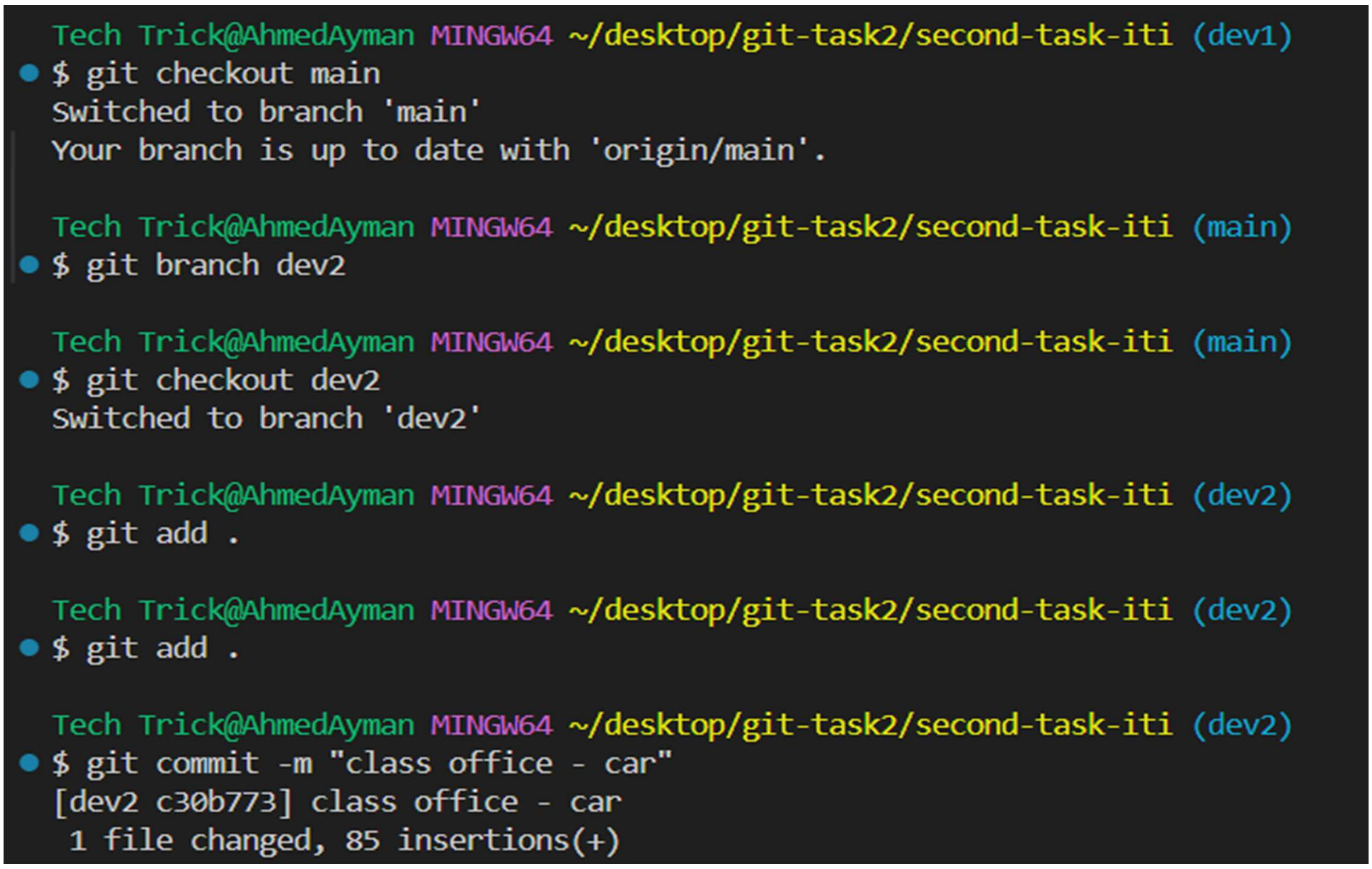
```
  Tech Trick@AhmedAyman MINGW64 ~ (main)
● $ cd desktop

  Tech Trick@AhmedAyman MINGW64 ~/desktop (main)
● $ mkdir git-task2

  Tech Trick@AhmedAyman MINGW64 ~/desktop (main)
● $ cd git-task2

  Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (main)
● $ git init
  Initialized empty Git repository in C:/Users/Tech Trick/Desktop/git-task2/.git/

  Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (master)
● $ git branch -m main

  Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (main)
● $ git remote add origin https://github.com/ahmed-ayman-99/second-task-iti

  Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (main)
● $ git remote --v
  origin  https://github.com/ahmed-ayman-99/second-task-iti (fetch)
  origin  https://github.com/ahmed-ayman-99/second-task-iti (push)

  Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (main)
● $ git clone https://github.com/ahmed-ayman-99/second-task-iti
  Cloning into 'second-task-iti'...
  remote: Enumerating objects: 6, done.
  remote: Counting objects: 100% (6/6), done.
  remote: Compressing objects: 100% (3/3), done.
  remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
  Receiving objects: 100% (6/6), done.
```

- **<u>Create first branch “dev1” and add class person – class employee</u>**



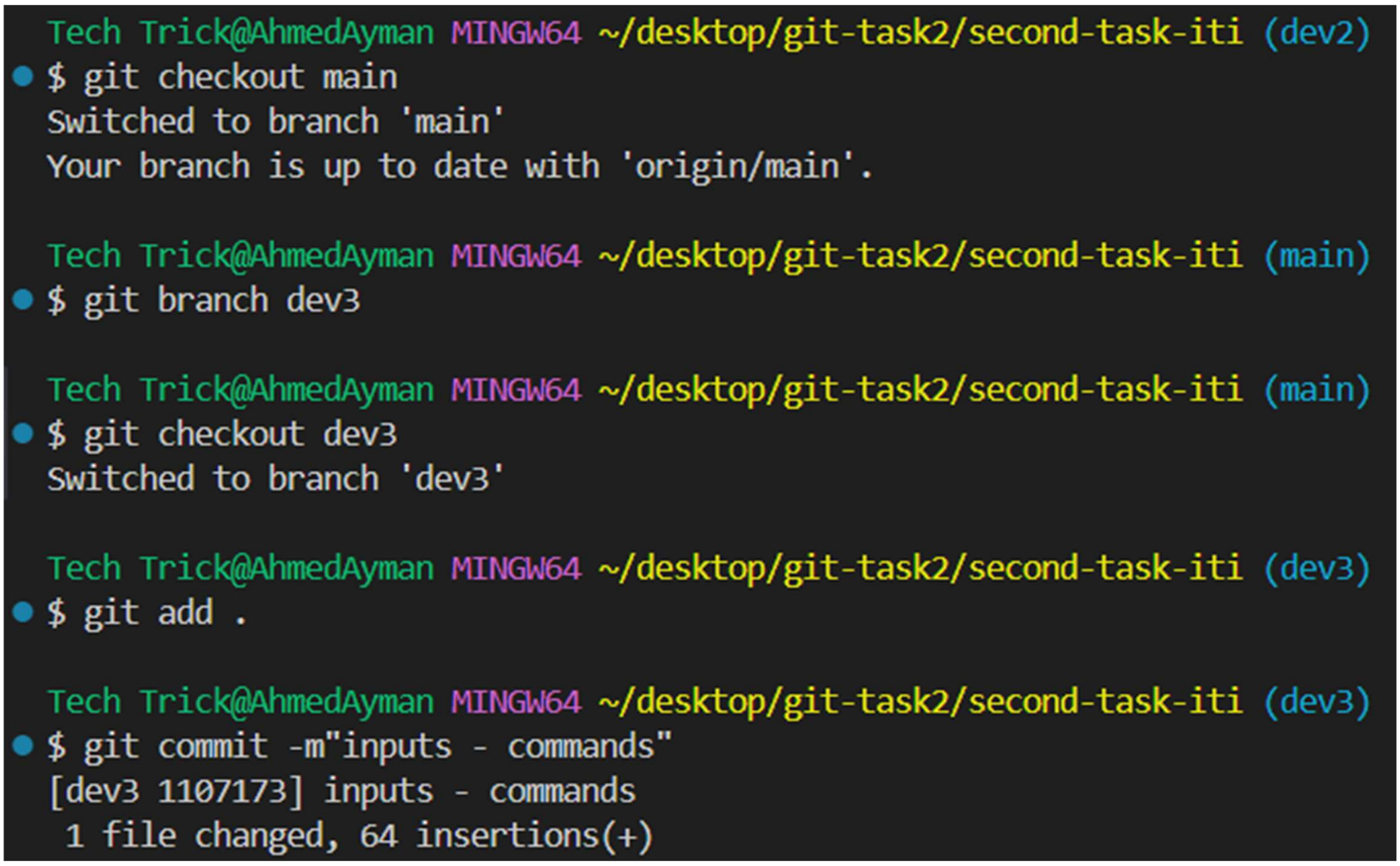
```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (main)
$ ls
second-task-iti/

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2 (main)
$ cd second-task-iti

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ ls
Git-task2.py  README.md

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git branch dev1

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git checkout dev1
Switched to branch 'dev1'

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev1)
$ git add .

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev1)
$ git commit -m"class person - employee"
[dev1 9138db0] class person - employee
 1 file changed, 64 insertions(+)
```

- **<u>Create second branch “dev2” and add class office – class car</u>**



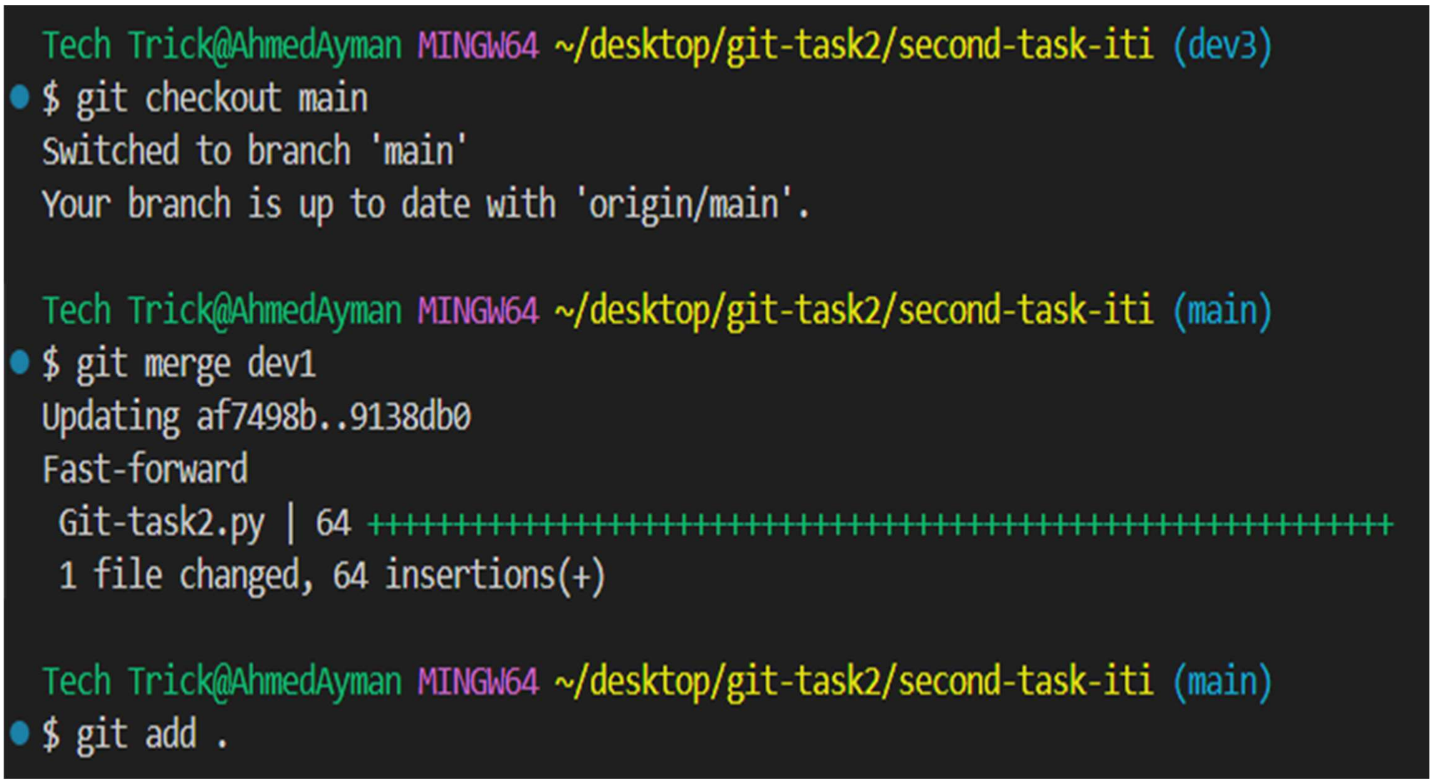
```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev1)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git branch dev2

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git checkout dev2
Switched to branch 'dev2'

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev2)
$ git add .

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev2)
$ git add .

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev2)
$ git commit -m "class office - car"
[dev2 c30b773] class office - car
 1 file changed, 85 insertions(+)
```

- **Create third branch "dev3" and add inputs and commands**



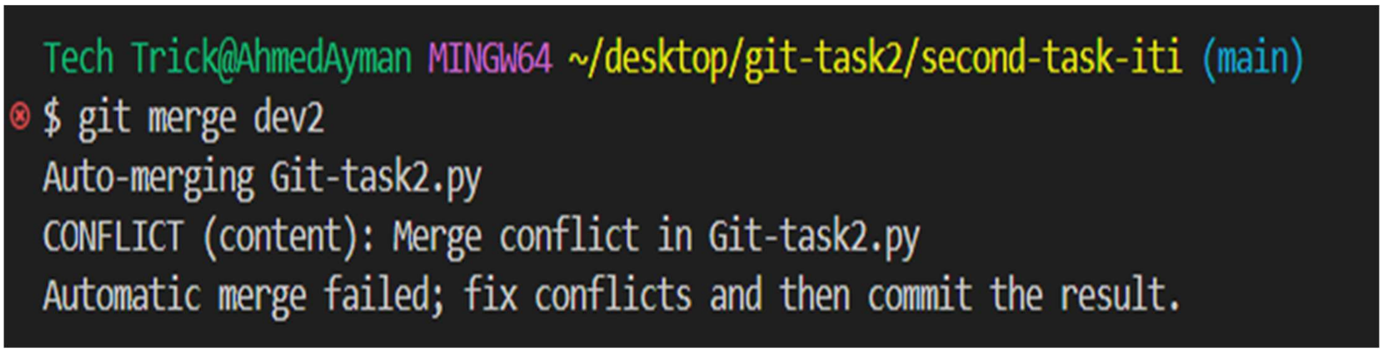
```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev2)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git branch dev3

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git checkout dev3
Switched to branch 'dev3'

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev3)
$ git add .

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev3)
$ git commit -m"inputs - commands"
[dev3 1107173] inputs - commands
 1 file changed, 64 insertions(+)
```

- **Merge dev1 to main**



```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (dev3)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git merge dev1
Updating af7498b..9138db0
Fast-forward
 Git-task2.py | 64 ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 1 file changed, 64 insertions(+)

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git add .
```

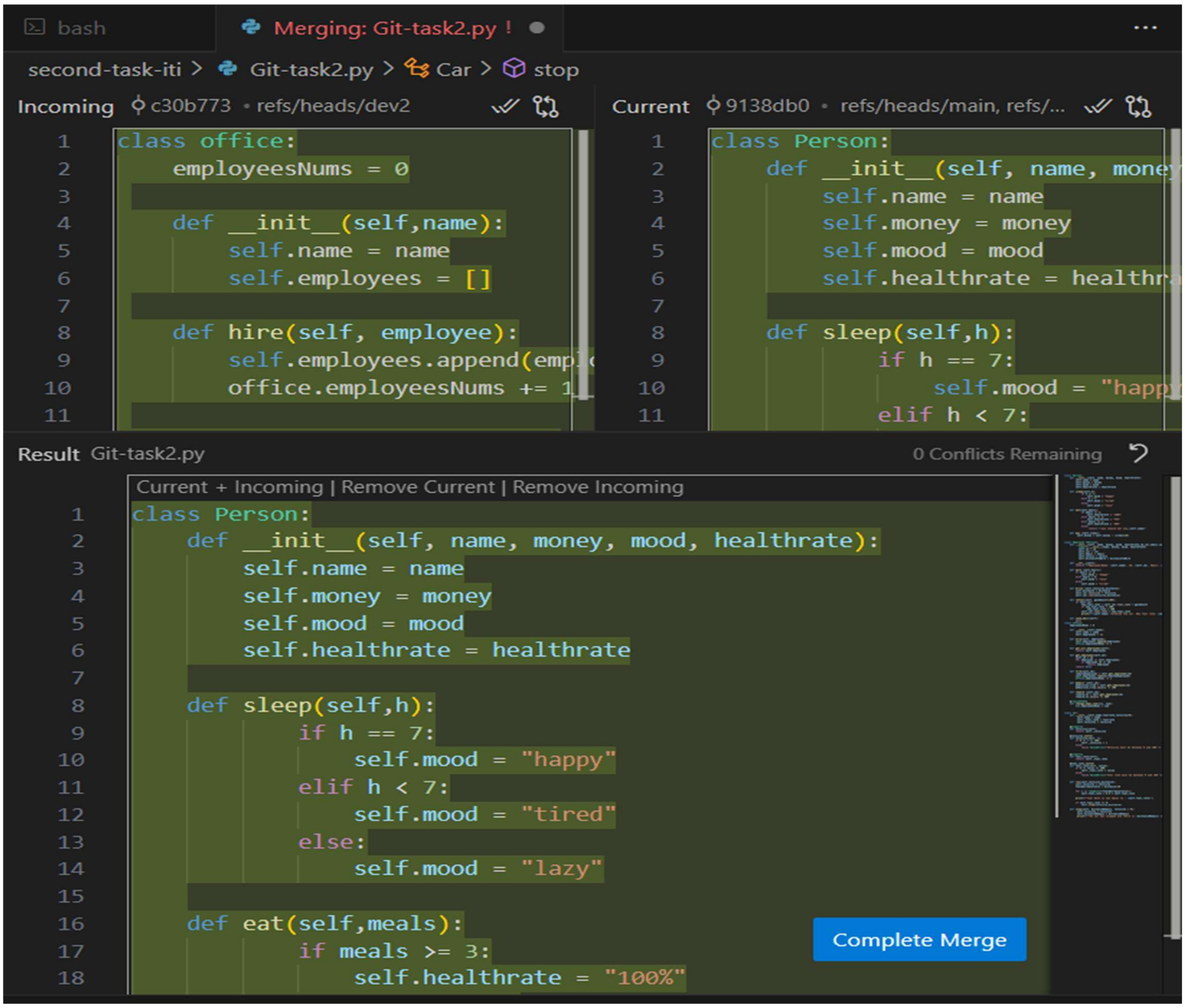
- **Merge dev2 to main**



```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git merge dev2
Auto-merging Git-task2.py
CONFLICT (content): Merge conflict in Git-task2.py
Automatic merge failed; fix conflicts and then commit the result.
```

- **Solve merging conflict by adding the whole code together in one page:**

Resolve in merge editor -----→ complete merge



bash
Merging: Git-task2.py !
second-task-iti > Git-task2.py > Car > stop
Incoming c30b773 • refs/heads/dev2
Current 9138db0 • refs/heads/main, refs/...
Result Git-task2.py
0 Conflicts Remaining
Current + Incoming | Remove Current | Remove Incoming
Complete Merge

Incoming:

```
class office:
    employeesNums = 0

    def __init__(self,name):
        self.name = name
        self.employees = []

    def hire(self, employee):
        self.employees.append(empl
        office.employeesNums += 1
```

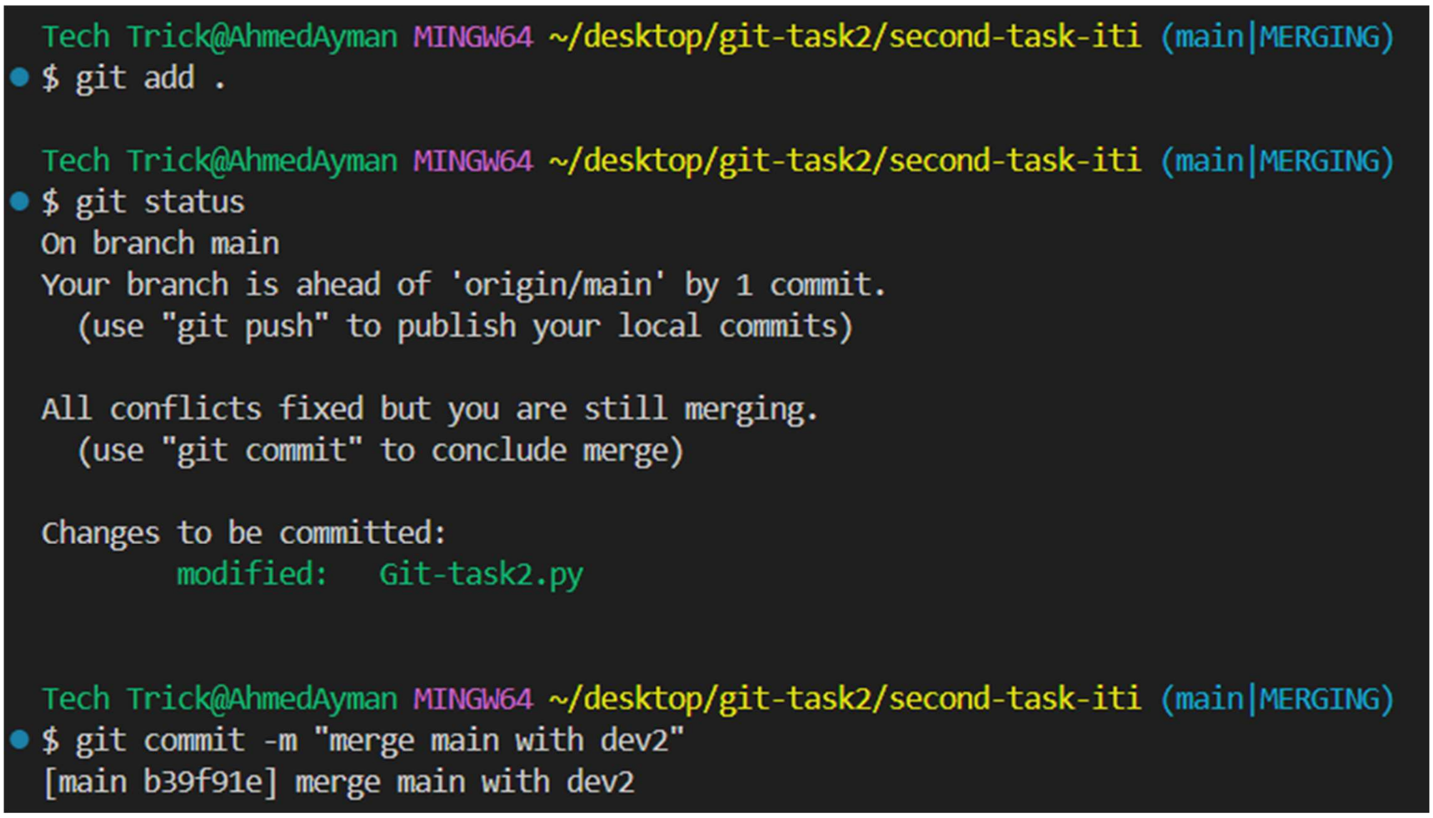
Current:

```
class Person:
    def __init__(self, name, mone
        self.name = name
        self.money = money
        self.mood = mood
        self.healthrate = healthra

    def sleep(self,h):
        if h == 7:
            self.mood = "happ
        elif h < 7:
```

Result:

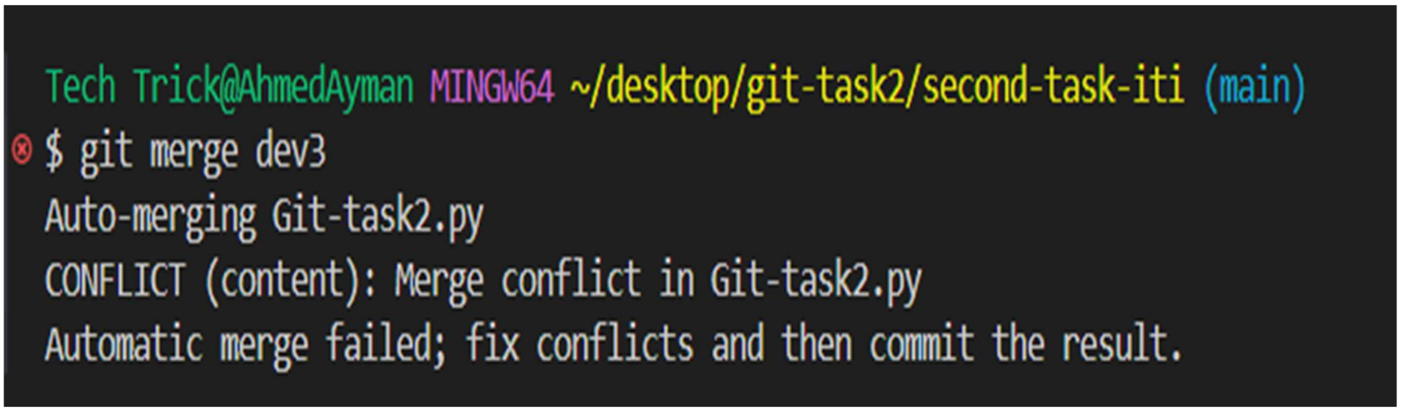
```
class Person:
    def __init__(self, name, money, mood, healthrate):
        self.name = name
        self.money = money
        self.mood = mood
        self.healthrate = healthrate

    def sleep(self,h):
        if h == 7:
            self.mood = "happy"
        elif h < 7:
            self.mood = "tired"
        else:
            self.mood = "lazy"

    def eat(self,meals):
        if meals >= 3:
            self.healthrate = "100%"
```

- **<u>Add and commit “main branch” after solving merge conflict wit “dev2”</u>**



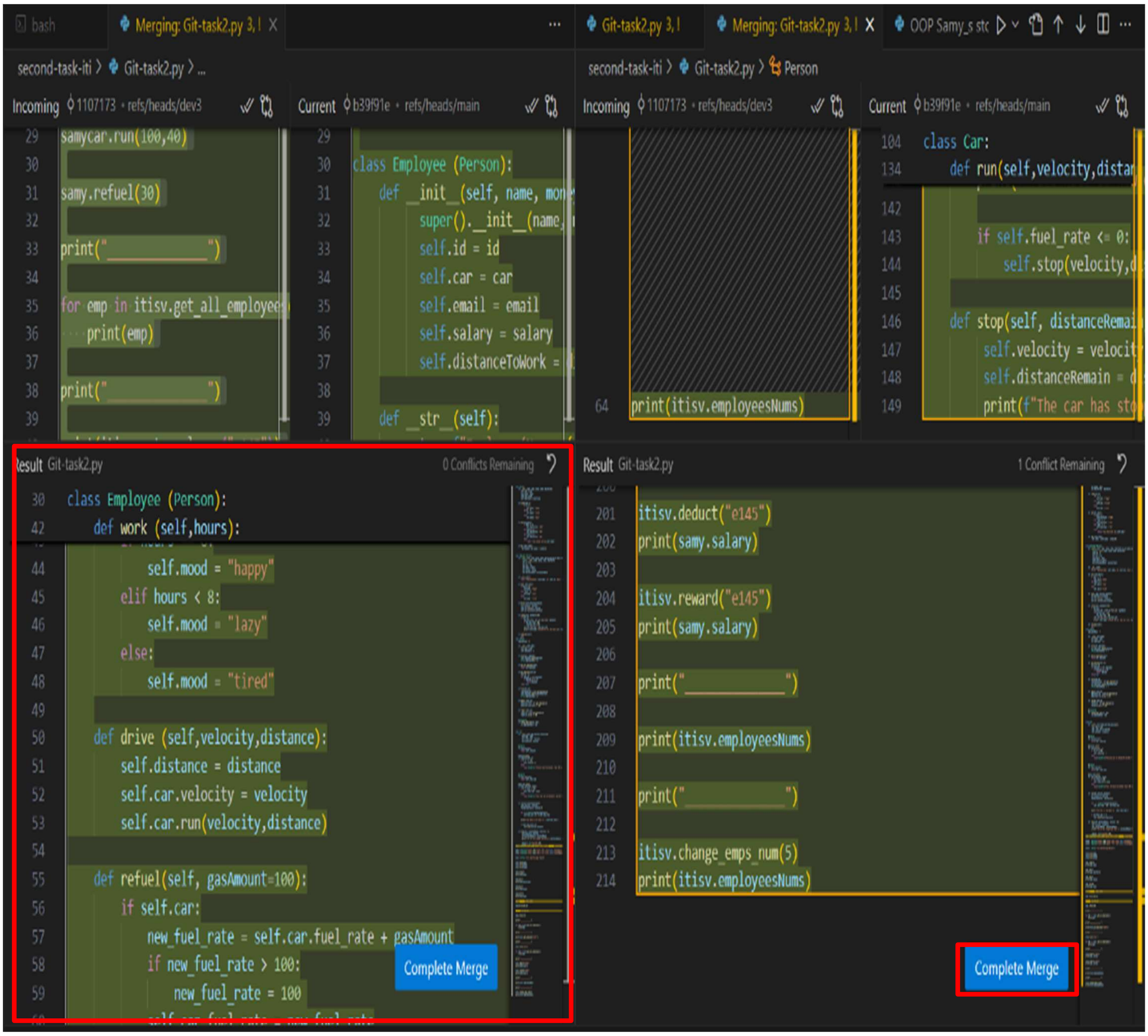
```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main|MERGING)
$ git add .

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main|MERGING)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

All conflicts fixed but you are still merging.
  (use "git commit" to conclude merge)

Changes to be committed:
        modified:   Git-task2.py


Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main|MERGING)
$ git commit -m "merge main with dev2"
[main b39f91e] merge main with dev2
```

- **<u>Merge dev3 to main</u>**



```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git merge dev3
Auto-merging Git-task2.py
CONFLICT (content): Merge conflict in Git-task2.py
Automatic merge failed; fix conflicts and then commit the result.
```

- **Resolve in merge editor**



bash
Merging: Git-task2.py 3, !
Git-task2.py 3, !
OOP Samy_s stc
second-task-iti > Git-task2.py > ...
second-task-iti > Git-task2.py > Person
Incoming 1107173 refs/heads/dev3
Current b39f91e refs/heads/main
Result Git-task2.py
0 Conflicts Remaining
1 Conflict Remaining
Complete Merge

```
samycar.run(100,40)

samy.refuel(30)

print("___________")

for emp in itisv.get_all_employee
    print(emp)

print("___________")
```

```
class Employee (Person):
    def __init__(self, name, mon
        super().__init__(name,
        self.id = id
        self.car = car
        self.email = email
        self.salary = salary
        self.distanceToWork =

    def __str__(self):
```

```
print(itisv.employeesNums)
```

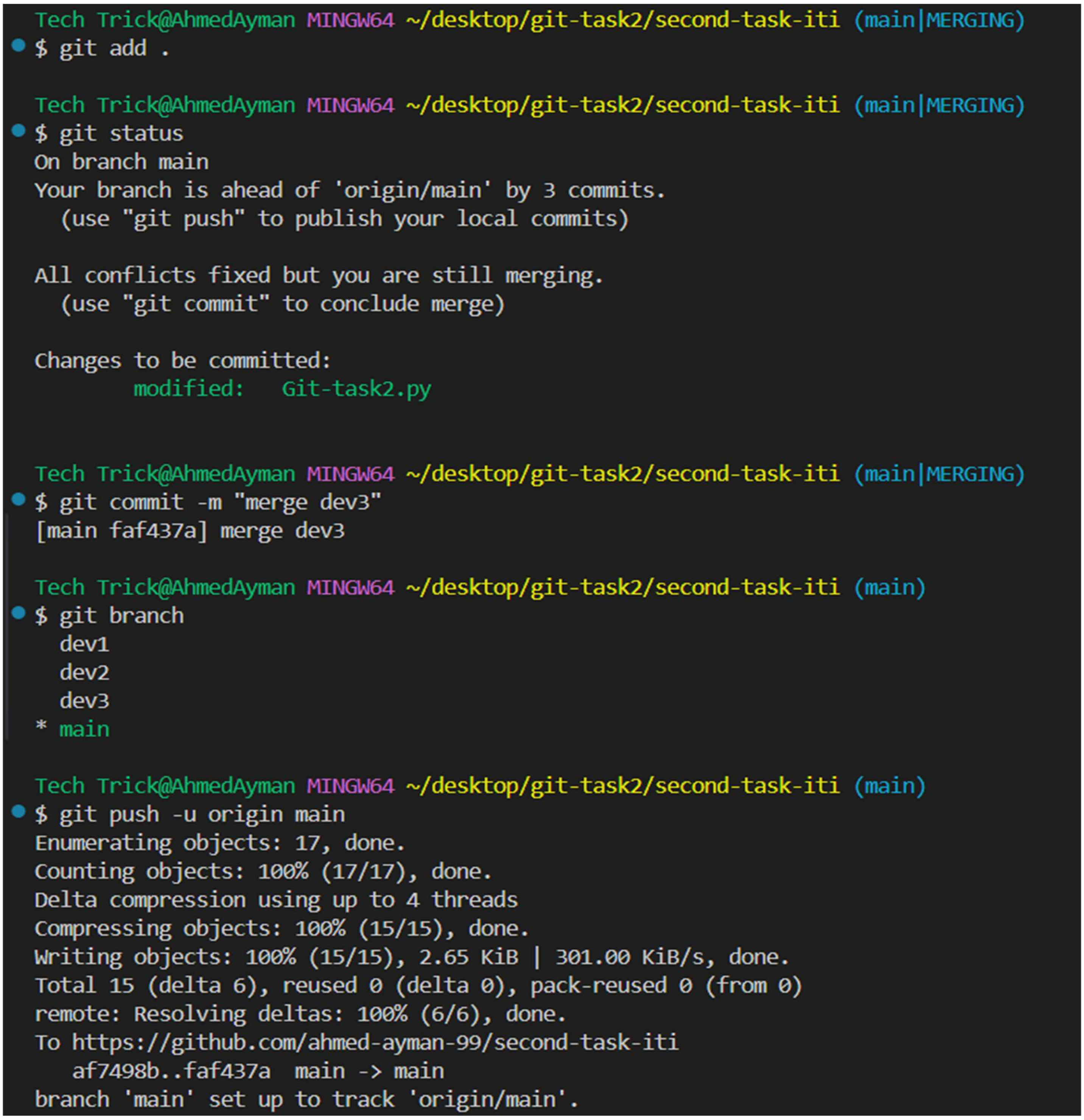
```
class Car:
    def run(self,velocity,distan

        if self.fuel_rate <= 0:
            self.stop(velocity,d

    def stop(self, distanceRemai
        self.velocity = velocit
        self.distanceRemain = d
        print(f"The car has sto
```

```
class Employee (Person):
    def work (self,hours):
            self.mood = "happy"
        elif hours < 8:
            self.mood = "lazy"
        else:
            self.mood = "tired"

    def drive (self,velocity,distance):
        self.distance = distance
        self.car.velocity = velocity
        self.car.run(velocity,distance)

    def refuel(self, gasAmount=100):
        if self.car:
            new_fuel_rate = self.car.fuel_rate + gasAmount
            if new_fuel_rate > 100:
                new_fuel_rate = 100
```

```
itisv.deduct("e145")
print(samy.salary)

itisv.reward("e145")
print(samy.salary)

print("___________")

print(itisv.employeesNums)

print("___________")

itisv.change_emps_num(5)
print(itisv.employeesNums)
```

After resolve conflict while merging dev3

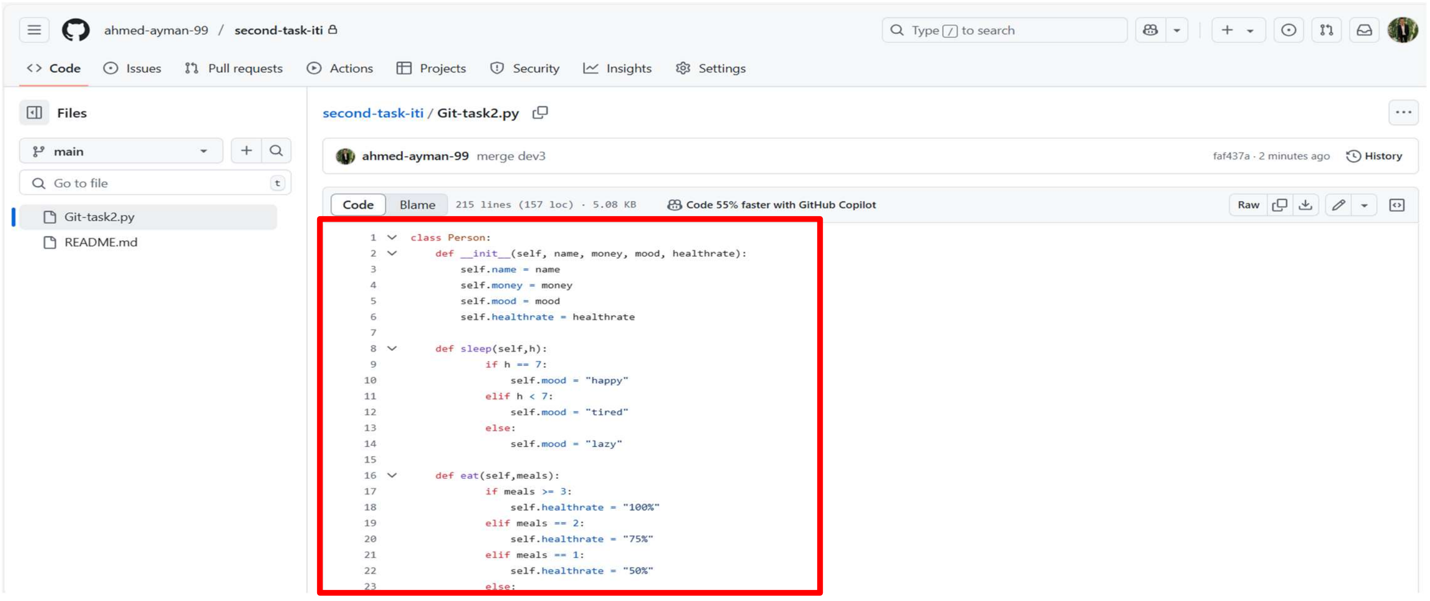
- **Add and commit to main branch**
- **Then push main branch**



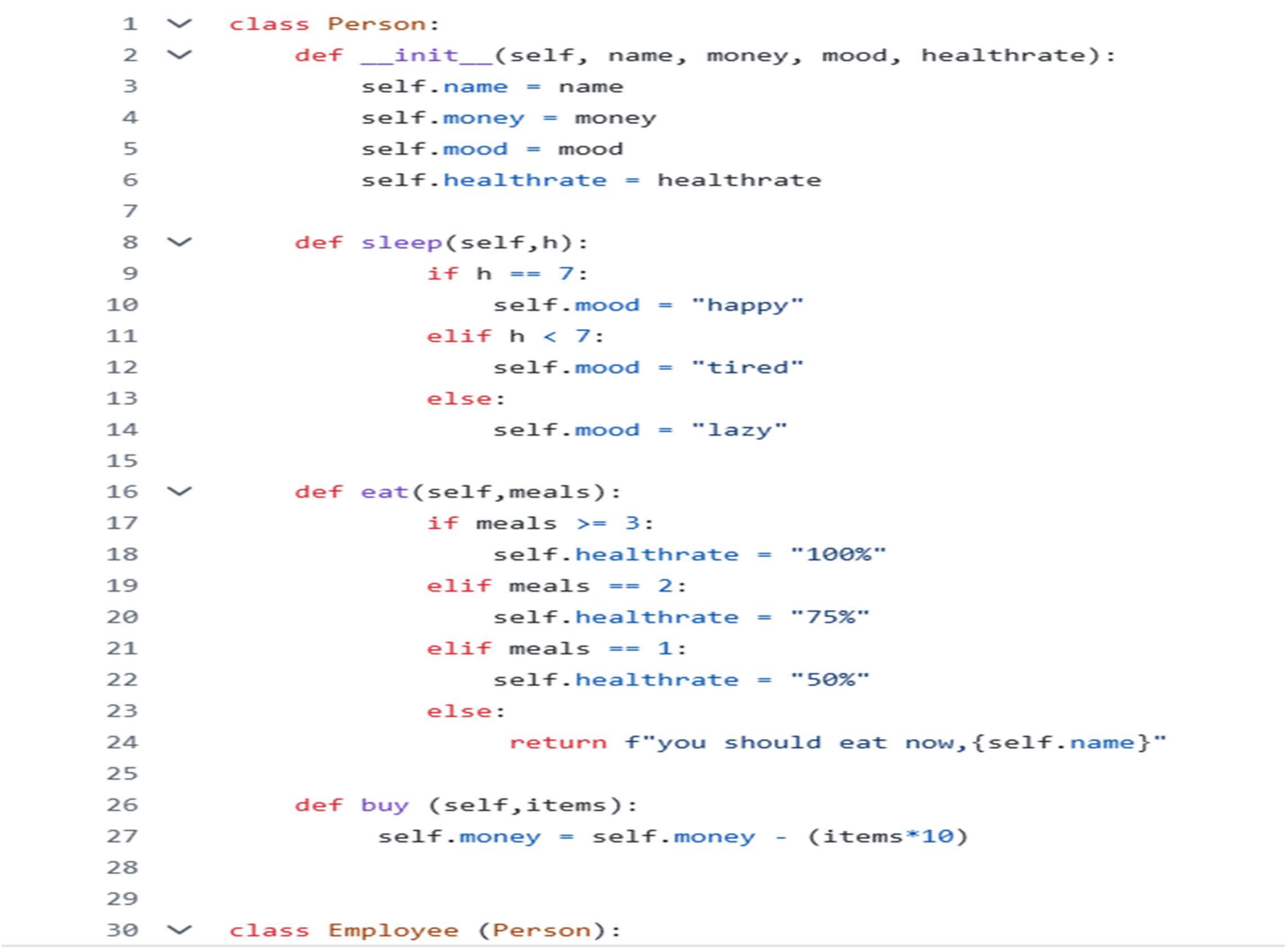
```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main|MERGING)
$ git add .

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main|MERGING)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)

All conflicts fixed but you are still merging.
  (use "git commit" to conclude merge)

Changes to be committed:
        modified:   Git-task2.py


Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main|MERGING)
$ git commit -m "merge dev3"
[main faf437a] merge dev3

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git branch
  dev1
  dev2
  dev3
* main

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git push -u origin main
Enumerating objects: 17, done.
Counting objects: 100% (17/17), done.
Delta compression using up to 4 threads
Compressing objects: 100% (15/15), done.
Writing objects: 100% (15/15), 2.65 KiB | 301.00 KiB/s, done.
Total 15 (delta 6), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (6/6), done.
To https://github.com/ahmed-ayman-99/second-task-iti
   af7498b..faf437a  main -> main
branch 'main' set up to track 'origin/main'.
```

- <u>**Check the repo in GitHub**</u>

  The whole code is pushed there “appear in the repo”.

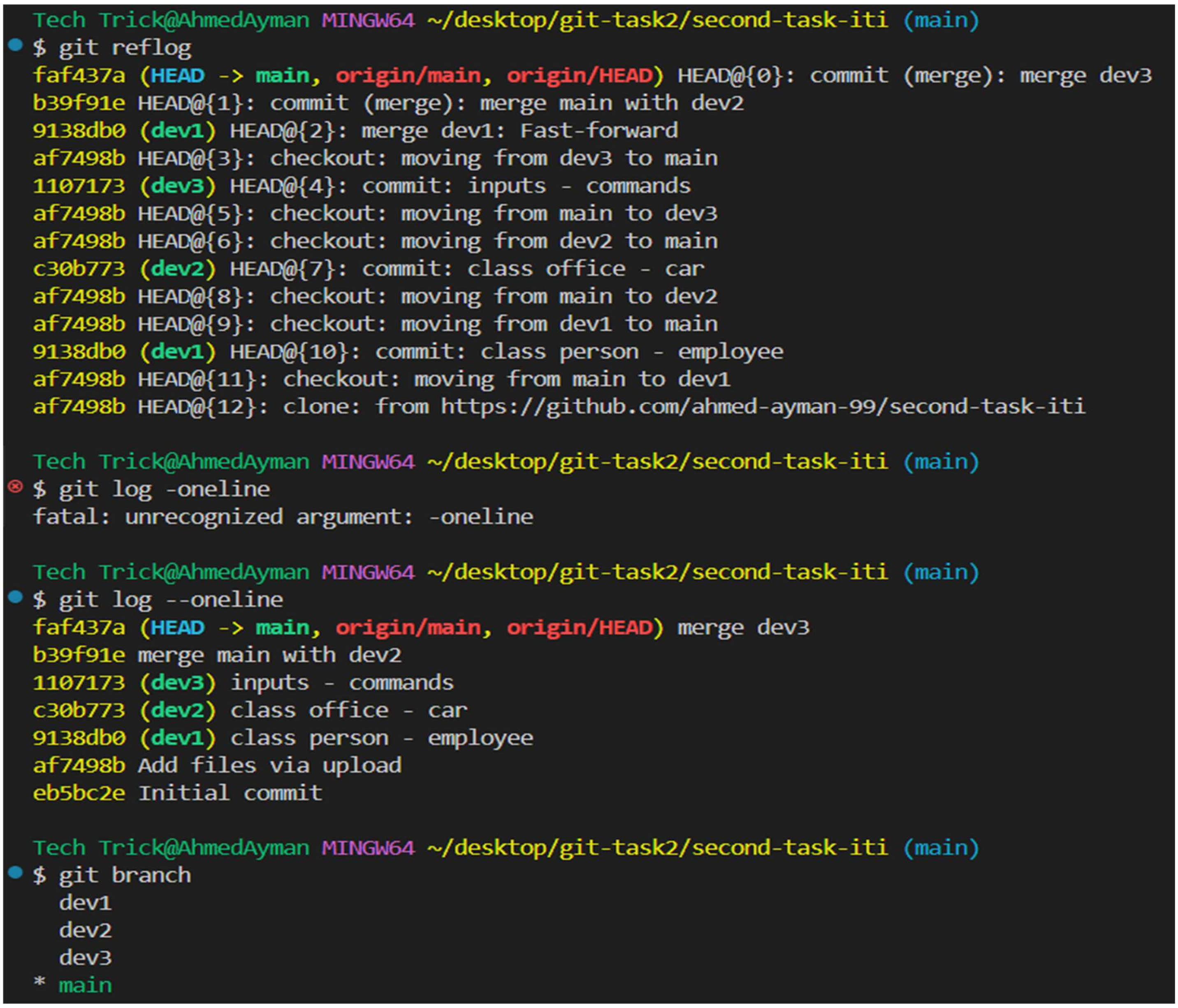


```python
class Person:
    def __init__(self, name, money, mood, healthrate):
        self.name = name
        self.money = money
        self.mood = mood
        self.healthrate = healthrate

    def sleep(self,h):
        if h == 7:
            self.mood = "happy"
        elif h < 7:
            self.mood = "tired"
        else:
            self.mood = "lazy"

    def eat(self,meals):
        if meals >= 3:
            self.healthrate = "100%"
        elif meals == 2:
            self.healthrate = "75%"
        elif meals == 1:
            self.healthrate = "50%"
        else:
```



```python
class Person:
    def __init__(self, name, money, mood, healthrate):
        self.name = name
        self.money = money
        self.mood = mood
        self.healthrate = healthrate

    def sleep(self,h):
            if h == 7:
                self.mood = "happy"
            elif h < 7:
                self.mood = "tired"
            else:
                self.mood = "lazy"

    def eat(self,meals):
            if meals >= 3:
                self.healthrate = "100%"
            elif meals == 2:
                self.healthrate = "75%"
            elif meals == 1:
                self.healthrate = "50%"
            else:
                 return f"you should eat now,{self.name}"

    def buy (self,items):
         self.money = self.money - (items*10)


class Employee (Person):
```

- **Log and Reflog and Branches from The Bash:**



```
Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git reflog
faf437a (HEAD -> main, origin/main, origin/HEAD) HEAD@{0}: commit (merge): merge dev3
b39f91e HEAD@{1}: commit (merge): merge main with dev2
9138db0 (dev1) HEAD@{2}: merge dev1: Fast-forward
af7498b HEAD@{3}: checkout: moving from dev3 to main
1107173 (dev3) HEAD@{4}: commit: inputs - commands
af7498b HEAD@{5}: checkout: moving from main to dev3
af7498b HEAD@{6}: checkout: moving from dev2 to main
c30b773 (dev2) HEAD@{7}: commit: class office - car
af7498b HEAD@{8}: checkout: moving from main to dev2
af7498b HEAD@{9}: checkout: moving from dev1 to main
9138db0 (dev1) HEAD@{10}: commit: class person - employee
af7498b HEAD@{11}: checkout: moving from main to dev1
af7498b HEAD@{12}: clone: from https://github.com/ahmed-ayman-99/second-task-iti

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git log -oneline
fatal: unrecognized argument: -oneline

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git log --oneline
faf437a (HEAD -> main, origin/main, origin/HEAD) merge dev3
b39f91e merge main with dev2
1107173 (dev3) inputs - commands
c30b773 (dev2) class office - car
9138db0 (dev1) class person - employee
af7498b Add files via upload
eb5bc2e Initial commit

Tech Trick@AhmedAyman MINGW64 ~/desktop/git-task2/second-task-iti (main)
$ git branch
  dev1
  dev2
  dev3
* main
```