# **Gitless Tasks**

## **Getting help**

- Command line help (e.g., git help, git/gl cmd -h, man git-cmd)
- Anything else you can find online (e.g., StackOverflow, Google searches)
- Please don't use your phone or other sources beyond the desktop (since we're trying to track what you needed)

## **Navigating tasks**

- Each session has a total of 7 tasks, each with a series of smaller steps
- For each step, we'll tell you what the resulting repository should look like
- If you make a mistake, don't worry! Just try to fix the problem, and remember you can search the web for help
- Don't go back to an old task: as soon as you move on to the next task we'll consider the previous task completed (if you finished all the steps) or abandoned
- Before each task you'll need to execute the bootstrap script ut-run with the next task number as input (instructions will be provided before each task). This script will clear what you've done so far and reset the repository to the state it's supposed to be for the next task.

## **Taking breaks**

 You'll be able to take breaks between tasks. You'll know when you can take a break because there will be a slide with this symbol:



### Misc tips

- Note that you are on a Mac so it's #+c to copy and #+v to paste (Ctrl+c/Ctrl+v won't work)
- You can configure the default text editor to be used when Gitless needs you to type in a message. If not configured, Gitless will use Vim. If you want to use a different text editor, such as Emacs, run the following command:
  - git config --global core.editor emacs
- There's a separate txt file \$SNIPPETS which you can open with your editor of choice and use that for copy/pasting text instead of doing it from the slides
- If a step is not clear to you try reading its corresponding "check." It might help you figure out what to do

### Fit-cli

In each session you'll be working as part of the team of fit industries Inc., developers of fit-cli. Fit-cli is a command line tool which given your gender, age, weight and height computes an estimate of the number of calories you burn per day just for being alive (also known as the resting metabolic rate).

Ever wanted to get a lower bound on the calories burned per day without leaving the command line? This is the app for you! Together with Alice (the CEO) and her team you are going to change the world.

### **Gitless**

The fit-cli team are huge fans of gitless and use gitless for version control. Throughout the session you'll be using gitless to track changes to the source code. Fit-cli is written in Python but you don't need to know any code; we'll tell you exactly what to change and how. What you'll need to figure out is how to use gitless to complete the requested tasks.

Before we begin, please take a few minutes to read the gitless documentation



You can take a break now if you want

Coming next: Task 0 (Practice Task)

### Task 0 (Practice Task): Clone the fit-cli repository

Let's set up our machine to be ready to contribute to fit-cli. To do this we are going to clone the fit-cli repository.

Open the terminal, go to ~/Documents and clone the fit-cli repo at \$FIT\_CLI\_REMOTE - check



You can take a break now if you want

Get your repository ready for the next task by running the command ut-run gl 1

#### Task 1: Add readme file

Maybe you didn't notice but our app has no readme file! What an atrocity! Let's fix this.

- 1) Create README.md with these contents
- 2) Track README.md check
- 3) Let's add usage instructions to the readme. Open README.md and make this change.
- 4) Create a commit with all changes to README.md and message "added readme" check



You can take a break now if you want

Get your repository ready for the next task by running the command ut-run gl 2

#### Task 2: Let users input weight in kilos

The fact that users can only input their weight in pounds and height in inches happens to be a huge deterrement to non-US users of fit-cli. Alice has instructed you to implement two new features: let users input weight in kilos and let them input height in meters.

First, we are going to begin by implementing the kilos feature.

- Let's be diligent and work in a separate branch. Create a new branch feat/kilos and switch to it check
- 2) Open file fit.py and <u>make this change</u> <u>check</u>
- 3) Create a commit with the changes to fit.py and message "kilos feature" check
- 4) Bob (the CTO) will review our changes. Run the ut-pr-kilos-send command to send a pull request.
- 5) Bob has send you some comments on your code. First, he suggested we add a help message to the kilos flag. That's an easy fix! Open fit.py and <a href="makethischange">makethischange</a> <a href="makethischange">check</a>

Bob also suggested that instead of using the  $w_{const_female}$  and  $w_{const_male}$  variables we should change that to a dictionary. This is going to take more time to fix, so we are going to put this aside for a while and work on the meters feature instead.



You can take a break now if you want

Get your repository ready for the next task by running the command ut-run gl 3

#### **Task 3:** Let users input height in meters (3.1)

- **3.1.** Let's get started with the height in meters feature.
- 1) Create a new branch feat/meters that diverges from master and switch to feat/meters <a href="mailto:check">check</a>
- 2) Open file fit.py and <u>make this change</u> <u>check</u>

### Task 3: Let users input height in meters (3.2)

- **3.2.** Alice just broke into your office! One of the main users of fit-cli reported a critical bug: no error is reported to the user if she inputs a value that is not the string "female" or "male" for the gender. Since she wants you to fix this right away, we are going to fix this bug, and then go back to working on our features.
  - 1) Switch back to master check
- 2) Open file fit.py and make this change check
- 3) Create a commit with the changes to fit.py and message "fix error checking bug" check
- 4) Publish the changes

Phew, the bug is now fixed. Now we are going to finish with our features.



You can take a break now if you want

Get your repository ready for the next task by running the command ut-run gl 4

#### **Task 4:** Wrap with features (4.1)

- **4.1.** Bob wants us to wrap up the kilos feature so that it gets shipped with the next release. So instead of going back to working on the meters feature, we are going to leave that aside and finish with kilos.
- Switch back to feat/kilos <u>check</u>
- 2) Let's change to using a dictionary like Bob wanted. Open fit.py and make this change check
- 3) Create a commit with the changes to fit.py and message "kilos improvements" <a href="mailto:check">check</a>
- 4) Update the kilos pull request: run the command ut-pr-kilos-update

#### **Task 4:** Wrap with features (4.2)

- **4.2.** While we wait to hear from Bob regarding the kilos feature, we are going to go back to finishing with the meters feature.
- 1) Switch to feat/meters <a href="mailto:check">check</a>
- 2) Now let's modify the computation of the rmb to use meters if the user specified so. Open fit.py and make this change check
- 3) Create a commit with the changes to fit.py and message "meters feature" check
- 4) Bob (the CTO) will review our changes. Run the ut-pr-meters-send command to send a pull request.



You can take a break now if you want

Get your repository ready for the next task by running the command ut-run gl 5

#### **Task 5:** Fixing conflicts (5.1)

- **5.1.** Bob accepted your kilos merge request, but now he's saying that the height pull request doesn't apply cleanly, and he's asking us to fix conflicts with master and update the pull request.
- 1) Update our local master branch with the new changes in the remote master <a href="master-check">check</a>
- 2) Switch back to feat/meters and fuse the changes from master (which will generate conflicts) <a href="mailto:check">check</a>
- 3) Let's start fixing conflicts. Open fit.py and make this change check

#### **Task 5:** Fixing conflicts (5.2)

- **5.2.** Bob just broke into your office! Apparently we've been using the wrong shebang line all of this time. He wants you to fix this right away. We are going to fix this bug, and then go back to finish resolving the conflicts.
- 1) Switch to master check
- 2) Open fit.py and <u>make this change</u> <u>check</u>
- 3) Create a commit with the changes to fit.py and message "fix shebang" <a href="mailto:check">check</a>
- 4) Publish

### **Task 5:** Fixing conflicts (5.3)

#### **5.3.** Let's finish fixing conflicts

- 1) Switch back to feat/meters and go back to the state where we where before fixing the bug <a href="mailto:check">check</a>
- 2) Open fit.py and <u>make this change</u> <u>check</u>
- 3) Finish with the fuse operation check
- 4) Update the meters pull request: run the command ut-pr-meters-update



You can take a break now if you want

Get your repository ready for the next task by running the command ut-run gl 6

#### Task 6: Code cleanup

- **6.1.** It's time to clean up our code. This should be a fairly small task so we are going to keep it simple and work on master.
- 1) Switch to master and pull changes <a href="mailto:check">check</a>
- 2) Open fit.py and <u>make this change</u> <u>check</u>
- 3) Create a commit with the changes to fit.py and message "join const dicts" check

#### Task 6: Code cleanup

- **6.2.** After a walk in the park you realized that the last commit might be wrong. So we are going to try something different.
- 1) Go back to the same state as before the commit check
- 2) Open fit.py and <u>make this change</u> <u>check</u>
- 3) Create a new commit with message "switch to using nt for consts" check
- 4) Using namedtuples looks better than merging the dictionaries, so let's go ahead and publish these changes

# The end!

Please complete the end of session survey

If this was your second session please complete the <u>end of study</u> <u>survey</u>

# Material for Task 0

Command	Expected output	
Assuming you are at ~/Documents		
ls	fit-cli	
Assuming you are at ~/Documents/fit-cli		
ls	fit.py	
gl branch	List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b  → * = current branch  * master (upstream is origin/master)</b></b></b>	
gl history -c	0e032fd first cut at fit-cli app f821dce Initialize repository	

# Material for Task 1

```
fit-cli
```

The ultimate fitness app. Give your gender, age, weight and height to fit-cli and get an estimate of the number of calories you burn per day just for being alive; all of this without leaving the command line!

Command	Expected output
gl status	On branch master, repo-directory //  Tracked files with modifications:  → these will be automatically considered for commit  → use gl untrack <f> if you don't want to track changes to file f  → if file f was committed before, use gl checkout <f> to discard local changes  README.md (new file)</f></f>
	<pre>Untracked files:   → these won't be considered for commit   → use gl track <f> if you want to track changes to file f   There are no untracked files to list</f></pre>

1) Add at the end of the file:

To run fit-cli execute the fit.py script which accepts the following optional flags: -g/--gender, -a/--age, -w/--weight, -h/--height.

```
Command
              Expected output
gl history -c | 5b01354 added readme
-v -l 1
              Diff of file "README.md"
               5 lines added
               0 lines removed
              @@ -0,0 +1,5 @@
                      1 +fit-cli
                      2 +======
                              +The ultimate fitness app. Give your gender, age, weight and height to fit-cli
               and get an estimate of the number of calories you burn per day just for being alive; all of this
               without leaving the command line!
                              +To run fit-cli execute the fit.py script which accepts the following optional
              flags:-g/--gender, -a/--age, -w/--weight, -h/--height.
              5b01354 added readme
gl history -c
               0e032fd first cut at fit-cli app
               f821dce Initialize repository
```

# Material for Task 2

Command	Expected output
gl branch	List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b  → * = current branch</b></b></b>
	<pre>* feat/kilos master (upstream is origin/master)</pre>

1) After line 13 (i.e., after the height flag) add the following text in a new line:

```
parser.add_argument('-k', '--kilos', action='store_true')
```

2) Update the rmb call to match:

```
result = rmb(
    args.gender, args.age, args.weight, args.height, use_kg=args.kilos)
```

3) Update the rmb function to match:

```
def rmb(gender, age, weight, height, use_kg=False):
    w_const_female = 9.56 if use_kg else 4.35
    w_const_male = 13.75 if use_kg else 6.25
    if gender == 'female':
        return (655 + w_const_female * weight + 4.7 * height - 4.7 * age) * 1.1
    else:
        return (66 + w_const_male * weight + 12.7 * height - 6.76 * age) * 1.1
```

#### Command **Expected output** gl diff Diff of file "fit.pv" 8 lines added 4 lines removed @@ -11,18 +11,22 @@ 11 11 parser.add argument('age', type=int) 12 parser.add argument('weight', type=int, help='in pounds') 12 13 13 parser.add argument('height', type=int, help='in inches') 14 + parser.add argument('-k', '--kilos', action='store true') args = parser.parse args() 14 15 15 16 16 - result = rmb(args.gender, args.age, args.weight, args.height) + result = rmb( 17 18 args.gender, args.age, args.weight, args.height, use kg=args.kilos) 17 19 18 20 print('Your resting metabolic rate is {0}'.format(result)) 19 21 20 22 21 -def rmb(gender, age, weight, height): +def rmb(gender, age, weight, height, use kg=False): 24 + w const female = 9.56 if use kg else 4.35 25 + w const male = 13.75 if use kg else 6.25 if gender == 'female': 22 26 23 - return (655 + 4.35 \* weight + 4.7 \* height - 4.7 \* age) \* 1.1 + return (655 + w\_const\_female \* weight + 4.7 \* height - 4.7 \* age) \* 1.1 27 24 28 else: 25 - return (66 + 6.25 \* weight + 12.7 \* height - 6.76 \* age) \* 1.1 + return (66 + w\_const\_male \* weight + 12.7 \* height - 6.76 \* age) \* 1.1 29 30 26 27 31 28 32 if name == ' main ':

```
Command
                           Expected output
gl history -c -v -l 1
                           c3de091 kilos feature
                           Diff of file "fit.py"
                           8 lines added
                           4 lines removed
                           @@ -11,18 +11,22 @@
                           11
                                             parser.add argument('age', type=int)
                                   11
                           12
                                             parser.add argument('weight', type=int, help='in pounds')
                           13
                                             parser.add argument('height', type=int, help='in inches')
                                   13
                                   14
                                        + parser.add argument('-k', '--kilos', action='store true')
                                             args = parser.parse args()
                           14
                                  15
                           15
                                          result = rmb(args.gender, args.age, args.weight, args.height)
                                   17
                                          + result = rmb(
                                   18
                                                 args.gender, args.age, args.weight, args.height, use kg=args.kilos)
                           17
                                   19
                           18
                                   20
                                             print('Your resting metabolic rate is {0}'.format(result))
                           19
                                   21
                           20
                                   22
                                          -def rmb(gender, age, weight, height):
                           21
                                   23
                                          +def rmb(gender, age, weight, height, use kg=False):
                                          + w const female = 9.56 if use kg else 4.35
                                          + w const male = 13.75 if use kg else 6.25
                                   25
                                             if gender == 'female':
                           22
                                   26
                           23
                                          - return (655 + 4.35 * weight + 4.7 * height - 4.7 * age) * 1.1
                                          + return (655 + w_const_female * weight + 4.7 * height - 4.7 * age) * 1.1
                           24
                                   28
                                             else:
                           25
                                          - return (66 + 6.25 * weight + 12.7 * height - 6.76 * age) * 1.1
                                          + return (66 + w_const_male * weight + 12.7 * height - 6.76 * age) * 1.1
                                   29
                           26
                                   30
                                   31
                           28
                                   32
                                           if name == ' main ':
gl history -c
                           c3de091 kilos feature
                           5b01354 added readme
                           0e032fd first cut at fit-cli app
                           f821dce Initialize repository
```

1) Change the kilos argument (line 14) to:

```
parser.add_argument(
    '-k', '--kilos', action='store_true',
    help='if true, then the weight given as input is interpreted as kg')
```

```
Command
             Expected output
             Diff of file "fit.py"
gl diff
             3 lines added
             1 line removed
             @@ -11,7 +11,9 @@
             11
                               parser.add argument('age', type=int)
                11
             12 12
                               parser.add argument('weight', type=int, help='in pounds')
             13
                               parser.add argument('height', type=int, help='in inches')
                13
                            - parser.add argument('-k', '--kilos', action='store true')
             14
                    14
                            + parser.add argument(
                            + '-k', '--kilos', action='store true',
                    15
                    16
                                  help='if true, then the weight given as input is
                            +
             interpreted as kg')
             15
                    17
                               args = parser.parse args()
             16
                    18
                               result = rmb(
             17
                    19
```

# Material for Task 3

Command	Expected output
gl branch -v	List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b</b></b></b>
	<pre>→ * = current branch  feat/kilos   → head is c3de091 kilos feature  * feat/meters   → head is 5b01354 added readme</pre>
	master (upstream is origin/master)  → head is 5b01354 added readme

1) After line 13 (i.e., after the height flag) add the following text in a new line:

```
parser.add_argument(
    '-m', '--meters', action='store_true',
    help='if true, the height input will be interpreted in meters')
```

2) Update the rmb call to match:

```
result = rmb(
    args.gender, args.age, args.weight, args.height, use_m=args.meters)
```

3) Update the rmb function to match:

```
def rmb(gender, age, weight, height, use_m=False):
    h_const= {
        'female': 1.8 if use_m else 4.7,
        'male': 5 if use_m else 12.7
      }
    if gender == 'female':
      return (655 + 4.35 * weight + 4.7 * height - 4.7 * age) * 1.1
    else:
      return (66 + 6.25 * weight + 12.7 * height - 6.76 * age) * 1.1
```

```
Command
                                          Expected output
gl diff
                                          Diff of file "fit.py"
                                          10 lines added
                                          2 lines removed
                                          @@ -11,14 +11,22 @@
                                          11
                                                 11
                                                            parser.add_argument('age', type=int)
                                          12
                                                            parser.add_argument('weight', type=int, help='in pounds')
                                                 12
                                          13
                                                            parser.add_argument('height', type=int, help='in inches')
                                                 13
                                                         + parser.add_argument(
                                                  14
                                                  15
                                                                '-m', '--meters', action='store_true',
                                                  16
                                                                help='if true, the height input will be interpreted in meters')
                                                 17
                                                            args = parser.parse_args()
                                          14
                                                 18
                                          15
                                          16
                                                          - result = rmb(args.gender, args.age, args.weight, args.height)
                                                  19
                                                         + result = rmb(
                                                  20
                                                                args.gender, args.age, args.weight, args.height, use_m=args.meters)
                                          17
                                                  21
                                          18
                                                  22
                                                            print('Your resting metabolic rate is {0}'.format(result))
                                          19
                                                  23
                                                  24
                                          20
                                          21
                                                          -def rmb(gender, age, weight, height):
                                                  25
                                                         +def rmb(gender, age, weight, height, use_m=False):
                                                  26
                                                         + h_const= {
                                                  27
                                                                 'female': 1.8 if use_m else 4.7,
                                                  28
                                                                'male': 5 if use_m else 12.7
                                                  29
                                                            if gender == 'female':
                                          22
                                                  30
                                          23
                                                  31
                                                              return (655 + 4.35 * weight + 4.7 * height - 4.7 * age) * 1.1
                                          24
                                                  32
                                                             else:
```

Command	Expected output
gl branch	List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b  → * = current branch  feat/kilos  * feat/meters  master (upstream is origin/master)</b></b></b>
gl status	should show no uncommitted changes to fit.py

1) Replace the line declaring the gender argument (line 10) to:

```
parser.add_argument('gender', choices=['female', 'male'])
```

Command	Expected output
gl diff	Diff of file "fit.py"  1 line added  1 line removed  @@ -7,7 +7,7 @@  7

```
Command
                   Expected output
gl history -c -v
                   0b04279 fix error checking bug
-1 1
                   Diff of file "fit.py"
                   1 line added
                   1 line removed
                   @@ -7,7 +7,7 @@
                                      parser = argparse.ArgumentParser(
                                          description=(
                   9
                                             'fit-cli: compute your resting metabolic rate from the command
                   line'))
                   10
                                   - parser.add argument('gender')
                           10
                                   + parser.add argument('gender', choices=['female', 'male'])
                   11
                           11
                                      parser.add argument('age', type=int)
                   12
                           12
                                      parser.add argument('weight', type=int, help='in pounds')
                   13
                           13
                                      parser.add argument('height', type=int, help='in inches')
gl history -c
                   0b04279 fix error checking bug
                   1043f59 added readme
                   0e032fd first cut at fit-cli app
                   f821dce Initialize repository
```

# Material for Task 4

Command	Expected output
gl status	On branch feat/kilos, repo-directory //
	Tracked files with modifications:
	→ these will be automatically considered for commit
	→ use gl untrack <f> if you don't want to track changes to file f</f>
	→ if file f was committed before, use gl checkout <f> to discard local changes</f>
	fit.py
	Untracked files:
	• these won't be considered for commit
	→ use gl track <f> if you want to track changes to file f</f>
	Vase grander (17 11 you want to track changes to 111c 1
	There are no untracked files to list
gl diff	Diff of file "fit.py"
0	3 lines added
	1 line removed
	@@ -11,7 +11,9 @@
	11 11 parser.add_argument('age', type=int)
	12 12 parser.add_argument('weight', type=int, help='in pounds')
	13 13 parser.add_argument('height', type=int, help='in inches')
	14 - parser.add_argument('-k', 'kilos', action='store_true')
	14 + parser.add_argument(
	15 + '-k', 'kilos', action='store_true',
	16 + help='if true, then the weight given as input is interpreted as kg')
	15 17 args = parser.parse_args()
	16 18
	17

1) Update the rmb function to match:

```
def rmb(gender, age, weight, height, use_kg=False):
    w_const = {
        'female': 9.56 if use_kg else 4.35,
        'male': 13.75 if use_kg else 6.25
        }
    if gender == 'female':
        return (655 + w_const[gender] * weight + 4.7 * height - 4.7 * age) * 1.1
    else:
        return (66 + w_const[gender] * weight + 12.7 * height - 6.76 * age) * 1.1
```

```
Command
                             Expected output
gl diff
                             Diff of file "fit.py"
                            9 lines added
                            5 lines removed
                             @@ -11,7 +11,9 @@
                                   11
                                               parser.add_argument('age', type=int)
                                               parser.add_argument('weight', type=int, help='in pounds')
                            13
                                               parser.add_argument('height', type=int, help='in inches')
                                            - parser.add_argument('-k', '--kilos', action='store_true')
                                    14
                                           + parser.add argument(
                                    15
                                                  '-k', '--kilos', action='store true',
                                    16
                                                  help='if true, then the weight given as input is interpreted as kg')
                            15
                                    17
                                               args = parser.parse args()
                            16
                                    18
                             17
                                    19
                                               result = rmb(
                             @@ -21,12 +23,14 @@
                            21
                                    23
                             22
                                    24
                             23
                                    25
                                            def rmb(gender, age, weight, height, use_kg=False):
                             24
                                            - w const female = 9.56 if use kg else 4.35
                            25
                                            - w_const_male = 13.75 if use_kg else 6.25
                                    26
                                           + w_const = {
                                    27
                                                  'female': 9.56 if use_kg else 4.35,
                                    28
                                                  'male': 13.75 if use_kg else 6.25
                                    29
                            26
                                    30
                                           if gender == 'female':
                                            - return (655 + w const female * weight + 4.7 * height - 4.7 * age) * 1.1
                                    31
                                            + return (655 + w_const[gender] * weight + 4.7 * height - 4.7 * age) * 1.1
                             28
                                    32
                                               else:
                             29
                                            - return (66 + w_const_male * weight + 12.7 * height - 6.76 * age) * 1.1
                                    33
                                            + return (66 + w_const[gender] * weight + 12.7 * height - 6.76 * age) * 1.1
                             30
                                    34
                             31
                                    35
                             32
                                    36
                                            if name == ' main ':
```

gl history -c -v -l 1	1f788f9 kilos Diff of file 9 9 lines added 5 lines remove @@ -11,7 +11,9 11 11 11 12 12	"fit.py" ed
	11 11	
	13 13 14 14 15 16 15 17 16 18 17 19	<pre>parser.add_argument('weight', type=int, help='in pounds') parser.add_argument('height', type=int, help='in inches') - parser.add_argument('-k', 'kilos', action='store_true') + parser.add_argument( + '-k', 'kilos', action='store_true', + help='if true, then the weight given as input is interpreted as kg') args = parser.parse_args()  result = rmb(</pre>
	@@ -21,12 +23	,14 @@
	21 23	
	22 24	
	23 25	def rmb(gender, age, weight, height, use_kg=False):
	24	<ul><li>- w_const_female = 9.56 if use_kg else 4.35</li></ul>
	25	<ul><li>w_const_male = 13.75 if use_kg else 6.25</li></ul>
	26	+ w_const = {
	27	+ 'female': 9.56 if use_kg else 4.35,
	28	+ 'male': 13.75 if use_kg else 6.25
	29	+ }
	26 30	if gender == 'female':
	27	- return (655 + w_const_female * weight + 4.7 * height - 4.7 * age) * 1.1
	31	+ return (655 + w_const[gender] * weight + 4.7 * height - 4.7 * age) * 1.1
	28 32 29	else:
	29 33	<pre>- return (66 + w_const_male * weight + 12.7 * height - 6.76 * age) * 1.1 + return (66 + w const[gender] * weight + 12.7 * height - 6.76 * age) * 1.1</pre>
	30 34	+ return (oo + w_const[gender] * weight + 12.7 * height - 6.76 * age) * 1.1
	30 34 31 35	
	31 35	if name == ' main ':
	32 36	IT

gl history -c	abd1aee kilos improvements
	0f4dc88 kilos feature
	1043f59 added readme
	0e032fd first cut at fit-cli app
	f821dce Initialize repository

	go back to task 4 (4.2)		
Command	Expected output		
gl branch	*List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b  → * = current branch  feat/kilos  * feat/meters  master (upstream is origin/master)</b></b></b>		
gl diff	Diff of file "fit.py"  10 lines added  2 lines removed  @@ -11,14 +11,22 @@  11		
	12 12 parser.add_argument('weight', type=int, help='in pounds') 13 13 parser.add_argument('height', type=int, help='in inches') 14 + parser.add_argument( 15 + '-m', 'meters', action='store_true', 16 + help='if true, the height input will be interpreted in meters') 14 17 args = parser.parse_args()		
	15 18 16 - result = rmb(args.gender, args.age, args.weight, args.height) 19 + result = rmb( 20 + args.gender, args.age, args.weight, args.height, use_m=args.meters) 17 21		
	18		
	22 30 if gender == 'female': 23 31 return (655 + 4.35 * weight + 4.7 * height - 4.7 * age) * 1.1 24 32 else:		

1) Update the rmb function to match:

```
def rmb(gender, age, weight, height, use_m=False):
    h_const= {
        'female': 1.8 if use_m else 4.7,
        'male': 5 if use_m else 12.7
        }
    if gender == 'female':
        return (655 + 4.35 * weight + h_const[gender] * height - 4.7 * age) * 1.1
    else:
        return (66 + 6.25 * weight + h_const[gender] * height - 6.76 * age) * 1.1
```

```
Command
                                Expected output
gl diff
                                Diff of file "fit.py"
                                12 lines added
                                4 lines removed
                                @@ -11,18 +11,26 @@
                                       11
                                                  parser.add_argument('age', type=int)
                                12
                                       12
                                                  parser.add argument('weight', type=int, help='in pounds')
                                13
                                       13
                                                  parser.add_argument('height', type=int, help='in inches')
                                        14
                                               + parser.add argument(
                                        15
                                                      '-m', '--meters', action='store_true',
                                        16
                                                      help='if true, the height input will be interpreted in meters')
                                14
                                       17
                                                  args = parser.parse args()
                                15
                                16
                                               result = rmb(args.gender, args.age, args.weight, args.height)
                                        19
                                               + result = rmb(
                                        20
                                                      args.gender, args.age, args.weight, args.height, use_m=args.meters)
                                17
                                        21
                                18
                                       22
                                                  print('Your resting metabolic rate is {0}'.format(result))
                                19
                                       23
                                20
                                       24
                                21
                                               -def rmb(gender, age, weight, height):
                                               +def rmb(gender, age, weight, height, use_m=False):
                                        26
                                               + h const= {
                                        27
                                                      'female': 1.8 if use_m else 4.7,
                                        28
                                                      'male': 5 if use m else 12.7
                                        29
                                22
                                       30
                                                if gender == 'female':
                                23
                                               - return (655 + 4.35 * weight + 4.7 * height - 4.7 * age) * 1.1
                                        31
                                               + return (655 + 4.35 * weight + h_const[gender] * height - 4.7 * age) * 1.1
                                24
                                                  else:
                                25
                                               - return (66 + 6.25 * weight + 12.7 * height - 6.76 * age) * 1.1
                                        33
                                               + return (66 + 6.25 * weight + h const[gender] * height - 6.76 * age) * 1.1
                                26
                                       34
                                27
                                       35
                                28
                                       36
                                                if name == ' main ':
```

```
Command
              Expected output
gl history
              57af2a0 meters feature
-c -v -l 1
              Diff of file "fit.py"
              12 lines added
              4 lines removed
              @@ -11,18 +11,26 @@
                                parser.add argument('age', type=int)
              11
                     11
              12
                     12
                                parser.add argument('weight', type=int, help='in pounds')
              13
                     13
                                parser.add argument('height', type=int, help='in inches')
                             + parser.add argument(
                      14
                                    '-m', '--meters', action='store_true',
                      15
                                    help='if true, the height input will be interpreted in meters')
                      16
                                args = parser.parse args()
              14
                     17
              15
                      18
              16
                              - result = rmb(args.gender, args.age, args.weight, args.height)
                             + result = rmb(
                     19
                      20
                                    args.gender, args.age, args.weight, args.height, use m=args.meters)
              17
                      21
              18
                      22
                                print('Your resting metabolic rate is {0}'.format(result))
              19
                      23
              20
                      24
              21
                              -def rmb(gender, age, weight, height):
                             +def rmb(gender, age, weight, height, use m=False):
                      25
                      26
                              + h const= {
                      27
                                    'female': 1.8 if use m else 4.7,
                      28
                                    'male': 5 if use m else 12.7
                      29
                                if gender == 'female':
              22
              23
                                  return (655 + 4.35 * weight + 4.7 * height - 4.7 * age) * 1.1
                             + return (655 + 4.35 * weight + h const[gender] * height - 4.7 * age) * 1.1
                      31
              24
                      32
                                else:
                              - return (66 + 6.25 * weight + 12.7 * height - 6.76 * age) * 1.1
              25
                      33
                             + return (66 + 6.25 * weight + h const[gender] * height - 6.76 * age) * 1.1
              26
                      34
              27
                      35
              28
                      36
                              if name == ' main ':
```

gl history -c

98b2361 meters feature fea42b3 added readme 0e032fd first cut at fit-cli app f821dce Initialize repository

# Material for Task 5

Command	Expected output
gl history -	Merges: ebd97bb 1620b1f 256c232 Merge branch 'feat/kilos' into tmp 1620b1f kilos improvements 03e9db4 kilos feature ebd97bb fix error checking bug fea42b3 added readme 0e032fd first cut at fit-cli app f821dce Initialize repository

Expected output
On branch feat/meters, repo-directory //
You are in the middle of a fuse; all conflicts must be resolved before commiting
→ use gl fuseabort to go back to the state before the fuse
→ use gl resolve <f> to mark file f as resolved</f>
→ once you solved all conflicts do gl commit to continue
Tracked files with modifications:
→ these will be automatically considered for commit
→ use gl untrack <f> if you don't want to track changes to file f</f>
→ if file f was committed before, use gl checkout <f> to discard local changes</f>
fit.py (with conflicts)
Untracked files:
→ these won't be considered for commit
→ use gl track <f> if you want to track changes to file f</f>
There are no untracked files to list

#### 1) Update the main function to match:

```
def main():
  parser = argparse.ArgumentParser(
      description=(
        'fit-cli: compute your resting metabolic rate from the command line'))
  parser.add argument('gender', choices=['female', 'male'])
  parser.add argument('age', type=int)
 parser.add argument('weight', type=int, help='in pounds')
  parser.add argument('height', type=int, help='in inches')
  parser.add argument(
      '-k', '--kilos', action='store_true',
      help='if true, then the weight given as input is interpreted as kg')
  parser.add argument(
      '-m', '--meters', action='store true',
      help='if true, the height input will be interpreted in meters')
  args = parser.parse args()
  result = rmb(
      args.gender, args.age, args.weight, args.height,
      use_kg=args.kilos, use_m=args.meters)
  print('Your resting metabolic rate is {0}'.format(result))
```

```
Expected output
Command
gl diff
                 Diff of file "fit.py"
                 17 lines added
                1 line removed
                 @@ -14,14 +14,19 @@
                        14
                                   parser.add_argument(
                 15
                        15
                                       '-k', '--kilos', action='store_true',
                 16
                        16
                                       help='if true, then the weight given as input is interpreted as
                 kg')
                        17
                                + parser.add argument(
                        18
                                       '-m', '--meters', action='store_true',
                        19
                                       help='if true, the height input will be interpreted in meters')
                 17
                        20
                                   args = parser.parse_args()
                 18
                        21
                 19
                                   result = rmb(
                 20
                                       args.gender, args.age, args.weight, args.height, use kg=args.
                 kilos)
                        23
                                       args.gender, args.age, args.weight, args.height,
                        24
                                       use_kg=args.kilos, use_m=args.meters)
                 21
                        25
                22
                        26
                                   print('Your resting metabolic rate is {0}'.format(result))
                 23
                        27
                 24
                        28
                                 +<<<<< HEAD
                         29
                 25
                        30
                                 def rmb(gender, age, weight, height, use_kg=False):
                 26
                        31
                                   w const = {
                 27
                        32
                                       'female': 9.56 if use kg else 4.35,
```

```
gl diff
           @@ -31,6 +36,17 @@
                               return (655 + w const[gender] * weight + 4.7 * height - 4.7
(cont)
                  36
           * age) * 1.1
           32
                  37
                               return (66 + w const[gender] * weight + 12.7 * height -
                  38
           6.76 * age) * 1.1
                  39
                          +def rmb(gender, age, weight, height, use m=False):
                  41
                          + h const= {
                  42
                                 'female': 1.8 if use m else 4.7,
                                 'male': 5 if use m else 12.7
                  43
                          + if gender == 'female':
                               return (655 + 4.35 * weight + h const[gender] * height -
           4.7 * age) * 1.1
                          + else:
                          + return (66 + 6.25 * weight + h const[gender] * height -
                  48
           6.76 * age) * 1.1
                  49
                          +>>>>> meters feature
           34
                  50
           35
                  51
           36
                  52
                           if name == ' main ':
```

Command	Expected output
gl branch	List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b  → * = current branch</b></b></b>
	<pre>feat/kilos   feat/meters * master (upstream is origin/master)</pre>

#### 1) Replace

```
#!/usr/bin/python
```

with

#!/usr/bin/env python

Command	Expected output
gl diff	Diff of file "fit.py"  1 line added  1 line removed  @@ -1,4 +1,4 @@  1 -#!/usr/bin/python  1 +#!/usr/bin/env python  2 2  3 3 import argparse  4 4

Command	Expected output
gl history -c -v -l 1	89139ef fix shebang
	Diff of file "fit.py"
	1 line added
	1 line removed
	@@ -1,4 +1,4 @@
	1 -#!/usr/bin/python
	1 +#!/usr/bin/env python
	2 2
	3 3 import argparse
	4 4
gl history -c	89139ef fix shebang
,	Merge commit
	Merges: 9c54f0d 76c132f
	01b5c78 Merge branch 'feat/kilos' into tmp
	76c132f kilos improvements
	68c23cf kilos feature
	9c54f0d fix error checking bug
	553d581 added readme
	0e032fd first cut at fit-cli app
	f821dce Initialize repository

Command	Expected output
gl status	On branch feat/meters, repo-directory //
	You are in the middle of a fuse; all conflicts must be resolved before commiting  → use gl fuseabort to go back to the state before the fuse  → use gl resolve <f> to mark file f as resolved  → once you solved all conflicts do gl commit to continue</f>
	<pre>Tracked files with modifications:     → these will be automatically considered for commit     → use gl untrack <f> if you don't want to track changes to file f     → if file f was committed before, use gl checkout <f> to discard local changes     fit.py (with conflicts)</f></f></pre>
	Untracked files:  → these won't be considered for commit  → use gl track <f> if you want to track changes to file f  There are no untracked files to list</f>

1) Update rmb to match:

```
def rmb(gender, age, weight, height, use_kg=False, use_m=False):
  w const = {
      'female': 9.56 if use kg else 4.35,
      'male': 13.75 if use kg else 6.25
  h const= {
      'female': 1.8 if use m else 4.7,
      'male': 5 if use m else 12.7
  if gender == 'female':
    return (
        655 + w const[gender] * weight + h const[gender] * height -
        4.7 * age) * 1.1
  else:
    return (
        66 + w_const[gender] * weight + h_const[gender] * height -
        6.76 * age) * 1.1
```

```
Com
        Expected output
mand
        Diff of file "fit.pv"
gl
diff
        17 lines added
        5 lines removed
        @@ -1,4 +1,4 @@
                        -#!/usr/bin/python
                        +#!/usr/bin/env python
        2
                2
                         import argparse
                3
                4
        @@ -14,23 +14,35 @@
                           parser.add argument(
                14
                               '-k', '--kilos', action='store true',
        15
                15
                16
                               help='if true, then the weight given as input is
        interpreted as kg')
                17
                        + parser.add argument(
                              '-m', '--meters', action='store true',
                18
                19
                               help='if true, the height input will be interpreted
        in meters')
                           args = parser.parse_args()
        17
                20
        18
                21
        19
                22
                           result = rmb(
        20
                               args.gender, args.age, args.weight, args.height,
        use kg=args.kilos)
                               args.gender, args.age, args.weight, args.height,
                23
                               use kg=args.kilos, use m=args.meters)
                24
        21
                25
                26
                           print('Your resting metabolic rate is {0}'.format
        22
        (result))
```

```
gl
         23
                27
         24
                28
diff
         25
                        -def rmb(gender, age, weight, height, use_kg=False):
(con
                29
                        +def rmb(gender, age, weight, height, use_kg=False, use_m=False):
t)
         26
                30
                           w const = {
         27
                               'female': 9.56 if use_kg else 4.35,
                31
                               'male': 13.75 if use kg else 6.25
                33
                34
                        + h const= {
                35
                                'female': 1.8 if use m else 4.7,
                36
                               'male': 5 if use m else 12.7
                37
         30
                38
                           if gender == 'female':
         31
                         - return (655 + w const[gender] * weight + 4.7 * height - 4.7 * age) *
        1.1
                39
                             return (
                                 655 + w_const[gender] * weight + h_const[gender] * height -
                41
                                 4.7 * age) * 1.1
         32
                           else:
         33
                             return (66 + w const[gender] * weight + 12.7 * height - 6.76 * age) *
        1.1
                43
                             return (
                                 66 + w const[gender] * weight + h const[gender] * height -
                                 6.76 * age) * 1.1
         34
         35
                47
                         if name == ' main ':
```

```
Comman
               Expected output
gl
               da4cdbe meters feature
               Diff of file "fit.py"
history -
               17 lines added
c -v -l 1
               5 lines removed
               @@ -1,4 +1,4 @@
                               -#!/usr/bin/python
                               +#!/usr/bin/env python
               3
                                import argparse
               @@ -14,23 +14,35 @@
                       14
                                  parser.add argument(
                                      '-k', '--kilos', action='store true',
               15
                                      help='if true, then the weight given as input is interpreted as
               16
               kg')
                       17
                               + parser.add argument(
                       18
                                      '-m', '--meters', action='store true',
                                      help='if true, the height input will be interpreted in meters')
                       19
               17
                       20
                                  args = parser.parse args()
               18
                       21
                       22
               19
                                  result = rmb(
               20
                                      args.gender, args.age, args.weight, args.height, use kg=args.
               kilos)
                                      args.gender, args.age, args.weight, args.height,
                                      use kg=args.kilos, use m=args.meters)
                       24
               21
                       25
               22
                       26
                                  print('Your resting metabolic rate is {0}'.format(result))
```

```
gl
          23
                  27
          24
                  28
histo
          25
                          -def rmb(gender, age, weight, height, use_kg=False):
ry -c
                          +def rmb(gender, age, weight, height, use_kg=False, use_m=False):
                  29
-v -1
                  30
                             w const = {
          27
                  31
                                 'female': 9.56 if use kg else 4.35,
(cont
          28
                  32
                                 'male': 13.75 if use_kg else 6.25
                  33
                  34
                          + h const= {
                  35
                                 'female': 1.8 if use m else 4.7,
                  36
                                 'male': 5 if use m else 12.7
                  37
          30
                             if gender == 'female':
          31
                               return (655 + w_const[gender] * weight + 4.7 * height - 4.7 * age) *
          1.1
                  39
                               return (
                                   655 + w const[gender] * weight + h const[gender] * height -
                  41
                                   4.7 * age) * 1.1
          32
                  42
                             else:
          33
                               return (66 + w const[gender] * weight + 12.7 * height - 6.76 * age) *
          1.1
                  43
                               return (
                  44
                                   66 + w_const[gender] * weight + h_const[gender] * height -
                  45
                                   6.76 * age) * 1.1
          34
                  46
          35
                  47
          36
                  48
                           if name == ' main ':
```

```
gl da4cdbe meters feature
history Merge commit
-c Merges: 9c54f0d 76c132f
01b5c78 Merge branch 'feat/kilos' into tmp
76c132f kilos improvements
68c23cf kilos feature
9c54f0d fix error checking bug
553d581 added readme
0e032fd first cut at fit-cli app
f821dce Initialize repository
```

# Material for Task 6

Command	Expected output
gl branch	List of branches:  → do gl branch -c <b> to create branch b  → do gl branch -d <b> to delete branch b  → do gl switch <b> to switch to branch b  → * = current branch</b></b></b>
	<pre>feat/kilos   feat/meters * master (upstream is origin/master)</pre>

#### 1) Update rmb to match:

```
def rmb(gender, age, weight, height, use_kg=False, use_m=False):
 const = {
      'weight': {
         'female': 9.56 if use_kg else 4.35,
         'male': 13.75 if use_kg else 6.25
        },
      'height': {
         'female': 1.8 if use_m else 4.7,
         'male': 5 if use m else 12.7
 if gender == 'female':
    return (
       655 + const['weight'][gender] * weight +
        const['height'][gender] * height - 4.7 * age) * 1.1
 else:
   return (
        66 + const['weight'][gender] * weight +
        const['height'][gender] * height - 6.76 * age) * 1.1
```

#### Command **Expected output** gl diff Diff of file "fit.py" 13 lines added 11 lines removed @@ -27,22 +27,24 @@ 27 28 28 29 29 def rmb(gender, age, weight, height, use kg=False, use m=False): 30 - w const = { 31 'female': 9.56 if use kg else 4.35, 32 'male': 13.75 if use kg else 6.25 33 34 - h const= { 35 'female': 1.8 if use m else 4.7, 'male': 5 if use m else 12.7 + const = { 31 'weight': { 'female': 9.56 if use kg else 4.35, 32 33 'male': 13.75 if use kg else 6.25 'height': { 'female': 1.8 if use m else 4.7, 36 'male': 5 if use m else 12.7 37 38 37 39 38 if gender == 'female': 39 41 return ( 655 + w\_const[gender] \* weight + h\_const[gender] \* height -41 4.7 \* age) \* 1.1 655 + const['weight'][gender] \* weight + 42 const['height'][gender] \* height - 4.7 \* age) \* 1.1 43 else: 42 43 return ( 45 44 66 + w const[gender] \* weight + h const[gender] \* height -45 6.76 \* age) \* 1.1 66 + const['weight'][gender] \* weight + 46 47 const['height'][gender] \* height - 6.76 \* age) \* 1.1 46 48 47 49 if name == ' main ':

Command	Expected output		
l history	fa1cef8 join	const dicts	
-c -v -l 1	Diff of file "fit.py"		
	13 lines adde		
	11 lines remo		
	@@ -27,22 +27	,24 @@	
	27 27		
	28 28		
	29 29	<pre>def rmb(gender, age, weight, height, use_kg=False,</pre>	
	use_m=False):		
	30	- w_const = {	
	31	- 'female': 9.56 if use_kg else 4.35,	
	32	- 'male': 13.75 if use_kg else 6.25	
	33	- }	
	34	- h_const= {	
	35	- 'female': 1.8 if use_m else 4.7,	
	36	- 'male': 5 if use_m else 12.7	
	30	+ const = {	
	31	+ 'weight': {	
	32 33	+ 'female': 9.56 if use_kg else 4.35, + 'male': 13.75 if use kg else 6.25	
	33	+ 'male': 13.75 if use_kg else 6.25 + },	
	35	+ }, + 'height': {	
	36	+ 'female': 1.8 if use_m else 4.7,	
	37	+ 'male': 5 if use m else 12.7	
	38	<del>-</del>	
	37 39		
	37 39	}	

```
gl
          38
                            if gender == 'female':
                 41
histor
          39
                              return (
у -с -
                                  655 + w_const[gender] * weight + h_const
v -1 1
          [gender] * height -
                               4.7 * age) * 1.1
(cont)
                         + 655 + const['weight'][gender] * weight +
                                  const['height'][gender] * height - 4.7 * age)
                  43
         * 1.1
          42
                            else:
                  44
                              return (
          43
                  45
                                  66 + w_const[gender] * weight + h_const
          [gender] * height -
                                  6.76 * age) * 1.1
                                  66 + const['weight'][gender] * weight +
                                  const['height'][gender] * height - 6.76 *
                  47
          age) * 1.1
          46
                  48
          47
                  49
          48
                  50
                          if __name__ == '__main__':
```

```
gl history -c
                      falcef8 join const dicts
                      Merge commit
                      Merges: 89139ef da4cdbe
                      ee530ee Merge branch 'feat/meters' into tmp
                      da4cdbe meters feature
                      89139ef fix shebang
                      Merge commit
                      Merges: 9c54f0d 76c132f
                      01b5c78 Merge branch 'feat/kilos' into tmp
                      76c132f kilos improvements
                      68c23cf kilos feature
                      9c54f0d fix error checking bug
                      553d581 added readme
                      0e032fd first cut at fit-cli app
                      f821dce Initialize repository
```

Command	Expected output
gl status	On branch master, repo-directory //
	Tracked files with modifications:
	→ these will be automatically considered for commit
	→ use gl untrack <f> if you don't want to track changes to file f</f>
	→ if file f was committed before, use gl checkout <f> to discard local changes</f>
	There are no tracked files with modifications to list
	Untracked files:
	→ these won't be considered for commit
	→ use gl track <f> if you want to track changes to file f</f>
	There are no untracked files to list

1) After line 3 (i.e., after import argparse) add the following text in a new line:

```
import collections
```

2) Update rmb to match:

```
def rmb(gender, age, weight, height, use kg=False, use m=False):
 Const = collections.namedtuple('Const', ['weight', 'height'])
  const = Const(
     {'female': 9.56 if use kg else 4.35,
       'male': 13.75 if use kg else 6.25},
     {'female': 1.8 if use m else 4.7,
       'male': 5 if use m else 12.7})
  if gender == 'female':
     return (
       655 + const.weight[gender] * weight +
        const.height[gender] * height - 4.7 * age) * 1.1
  else:
     return (
       66 + const.weight[gender] * weight +
        const.height[gender] * height - 6.76 * age) * 1.1
```

gl diff	Diff of fild 11 lines add 12 lines rer @@ -1,6 +1, 1 1 2 2	ded noved
	0@ -1,6 +1,1 1 1 2 2	moved 7 @@
	@@ -1,6 +1,7 1 1 2 2	7 @@
	1 1 2 2	
	2 2	#!/usr/bin/env python
	3 3	import argparse
	4	+import collections
	4 5	
	5 6	
	6 7	def main():
	@@ -27,22 +2	28,20 @@
	27 28	
	28 29	
	29 30	<pre>def rmb(gender, age, weight, height, use_kg=False, use_m=False):</pre>
	30	- w_const = {
	31	- 'female': 9.56 if use_kg else 4.35,
	32	- 'male': 13.75 if use_kg else 6.25
	33	- }
	34	- h_const= {
	35	- 'female': 1.8 if use_m else 4.7,
	36	- 'male': 5 if use_m else 12.7
	37	- }

```
gl diff
                              + Const = collections.namedtuple('Const', ['weight', 'height'])
                              + const = Const(
                                    {'female': 9.56 if use_kg else 4.35,
                       33
                                      'male': 13.75 if use_kg else 6.25},
                       34
                             + {'female': 1.8 if use_m else 4.7,
                       35
                                      'male': 5 if use_m else 12.7})
                      36
                                 if gender == 'female':
               38
                       37
               39
                                   return (
               40
                                       655 + w_const[gender] * weight + h_const[gender] *
               height -
                                      4.7 * age) * 1.1
                                      655 + const.weight[gender] * weight +
                                       const.height[gender] * height - 4.7 * age) * 1.1
               42
                       41
                                 else:
               43
                       42
                                   return (
               44
                                       66 + w_const[gender] * weight + h_const[gender] *
               height -
                                      6.76 * age) * 1.1
               45
                                      66 + const.weight[gender] * weight +
                       43
                                      const.height[gender] * height - 6.76 * age) * 1.1
               46
                       45
               47
               48
                               if name == ' main ':
```

Comman d	Expected output		
gl history -c -v -l 1	Diff of file "fit.py" 11 lines added 12 lines removed		
	<pre>@@ -1,6 +1,7 @@ 1</pre>		

```
gl history
                            + Const = collections.namedtuple('Const', ['weight', 'height'])
-c -v -l 1
                     32
                            + const = Const(
                                   {'female': 9.56 if use kg else 4.35,
                     33
                     34
                                  'male': 13.75 if use kg else 6.25},
                     35
                            + {'female': 1.8 if use m else 4.7,
                     36
                            + 'male': 5 if use m else 12.7})
                          if gender == 'female':
             38
                    37
             39
                     38
                                 return (
                                     655 + w const[gender] * weight + h const[gender] *
             40
             height -
             41
                                     4.7 * age) * 1.1
                                    655 + const.weight[gender] * weight +
                     39
                                     const.height[gender] * height - 4.7 * age) * 1.1
                     40
                     41
             42
                               else:
             43
                     42
                                 return (
                                     66 + w const[gender] * weight + h const[gender] * height
             44
             45
                                     6.76 * age) * 1.1
                                    66 + const.weight[gender] * weight +
                     43
                                     const.height[gender] * height - 6.76 * age) * 1.1
             46
                     45
             47
                     46
             48
                     47
                             if name == ' main ':
```

```
gl history
             84607c8 switch to using nt for consts
- c
             Merge commit
             Merges: 89139ef da4cdbe
             ee530ee Merge branch 'feat/meters' into tmp
             da4cdbe meters feature
             89139ef fix shebang
             Merge commit
             Merges: 9c54f0d 76c132f
             01b5c78 Merge branch 'feat/kilos' into tmp
             76c132f kilos improvements
             68c23cf kilos feature
             9c54f0d fix error checking bug
             553d581 added readme
             0e032fd first cut at fit-cli app
             f821dce Initialize repository
```