For mergeyamlfiles.py:

Documentation with test cases:

- The tests were conducted using 2 to 4 files (1 per directory) with the same name.
- The path given as input was '/home/ketaki/dir1/dir2/dir3/dir4/example.yami'.
- For the test cases, the location of files as well as contents in the files were changed.
- Everything in 'Output' is a screenshot of the program using jupyter.
- Test case 1: All keys have integer values
 - o /home/ketaki/dir1/dir2/dir3/dir4/example.yaml : size: 8 count: 2 o /home/ketaki/dir1/dir2/dir3/example.yaml : size: 12 color: blue Output: Enter the path to the file: /home/ketaki/dir1/dir2/dir3/dir4/example.yaml color: blue count: 2
- Test case 2: All keys have list values

size: 8

o /home/ketaki/dir1/dir2/dir3/dir4/example.yaml :

```
wishlist: ["car", "pony"]
```

o /home/ketaki/dir1/dir2/dir3/example.yaml :

```
wishlist: ["worldpeace"]
```

Output:

```
Enter the path to the file: /home/ketaki/dir1/dir2/dir3/dir4/example.yaml
wishlist:

    worldpeace

- car
- pony
```

- Test case 3: Nested keys
 - o /home/ketaki/dir1/dir2/dir3/dir4/example.yaml :

```
todo:
  vacuum:
     priority: high
   dishes:
     priority: low
```

o /home/ketaki/dir1/dir2/dir3/example.yaml :

```
todo:
dishes:
  priority: high
laundry:
  priority: low
```

Output:

- Test case 4: Nested keys with duplicate keys having different nested keys in them
 - /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

```
todo:
    vacuum:
      priority: high
    dishes:
      priority: low
/home/ketaki/dir1/dir2/dir3/example.yaml
    dishes:
     priority: high
     time: now
    laundry:
      priority: low

    Output: (All keys are preserved)

    Enter the path to the file:
                                      /home/ketaki/dir1/dir2/dir3/dir4/example.yaml
    todo:
      dishes:
        priority: low
        time: now
      laundry:
        priority: low
      vacuum:
        priority: high
```

- Test case 5: Nested keys with duplicate keys having different nested keys in them
 - /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

```
todo:
vacuum:
priority: high
dishes:
priority: low
Time: now

/home/ketaki/dir1/dir2/dir3/example.yaml
todo:
dishes:
```

- Test case 6: child's duplicate key is a list and parent's duplicate key is a string
 - /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

wishlist: [1, 2]

/home/ketaki/dir1/dir2/dir3/example.yaml

wishlist: blue

size: 8

o Output:

- blue

```
Enter the path to the file: /home/ketaki/dir1/dir2/dir3/dir4/example.yaml size: 8 wishlist: - 1 - 2
```

- Test case 7: child's duplicate key is a dict and parent's duplicate key is a list
 - o /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

todo:
vacuum:
priority: high
dishes:
priority: low

/home/ketaki/dir1/dir2/dir3/example.yaml

todo: dishes: 8 Electricity: off laundry: priority: low

Output: (All keys are preserved)

- Test case 8: child, first parent directory and second parent directory all have the files with the same name
 - /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

wishlist: ["worldpeace"]

/home/ketaki/dir1/dir2/dir3/example.yaml

wishlist: ["car", "pony"]

/home/ketaki/dir1/dir2/example.yaml

wishlist:

a:

b: 2

Output: (All keys are preserved)

wishlist:

- worldpeace
- car
- pony
- a:

b: 2

- Test case 9: First parent directory doesn't have the file but the second parent directory has it.
 - /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

size: 8 count: 2

/home/ketaki/dir1/dir2/example.yaml

size: 12 color: blue

o Output:

```
Enter the path to the file: /home/ketaki/dir1/dir2/dir3/dir4/example.yaml count: 2 size: 8
```

- Test case 10: Four directories have the same file
 - /home/ketaki/dir1/dir2/dir3/dir4/example.yaml

a: 1

/home/ketaki/dir1/dir2/dir3/example.yaml

```
a: 2
   b: [1,2,3]
/home/ketaki/dir1/dir2/example.yaml
   b: 6
   c: hi
o /home/ketaki/dir1/example.yaml
   size: 12
   color: blue
o Output:
   Enter the path to the file: /home/ketaki/dir1/dir2/dir3/dir4/example.yaml
   b:
   - 1
    - 2
    - 6
   c: hi
   color: blue
   size: 12
```

For mergeyamlfiles1.py:

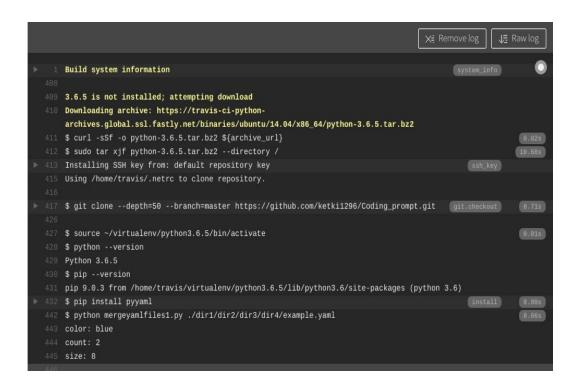
• Test case 1: All keys have integer values

o ./dir1/dir2/dir3/dir4/example.yaml:

size: 8 count: 2

o ./dir1/dir2/dir3/example.yaml:

size: 12 color: blue o Output:



Test case 2: All keys have list values

./dir1/dir2/dir3/dir4/example.yaml :

wishlist: ["car", "pony"]

./dir1/dir2/dir3/example.yaml :

wishlist: ["worldpeace"]

Output:

```
431 pip 9.0.3 from /home/travis/virtualenv/python3.6.5/lib/python3.6/site-packages (python 3.6)

432 $ pip install pyyaml install 8.35s

443 $ python mergeyamlfiles1.py ./dir1/dir2/dir3/dir4/example.yaml 6.06s

444 * worldpeace

445 - car

446 - pony

447

448 The command "python mergeyamlfiles1.py ./dir1/dir2/dir3/dir4/example.yaml" exited with 0.
```

- Test case 3: Nested keys
 - ./dir1/dir2/dir3/dir4/example.yaml :

todo:

vacuum:

priority: high

dishes:

priority: low

./dir1/dir2/dir3/example.yaml :

todo:

dishes: priority: high laundry: priority: low

o Output:

```
$ python mergeyamlfiles1.py ./dir1/dir2/dir3/dir4/example.yaml

443 todo:

444 dishes:

445 priority: low

446 laundry:

447 priority: low

448 vacuum:

449 priority: high

450

451 The command "python mergeyamlfiles1.py ./dir1/dir2/dir3/dir4/example.yaml" exited with 0.
```