

This is CS50

CS50's Introduction to Computer Science

OpenCourseWare

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Mario



Problem to Solve

In a file called `mario.py` in a folder called `sentimental-mario-more`, write a program that recreates a half-pyramid using hashes (`#`) for blocks, exactly as you did in [Problem Set 1](#). Your program this time should be written in Python!

Demo

```

    ####  ####
   #####  #####
  #####  #####
 #####  #####
#####  #####
$ python mario.py
Height: 4
  #  #
 ## ##
### ###
#### ####
$ python

```

Recorded with [asciinema](#)

Specification

- To make things more interesting, first prompt the user with `get_int` for the half-pyramid's height, a positive integer between `1` and `8`, inclusive. (The height of the half-pyramids pictured above happens to be `4`, the width of each half-pyramid `4`, with a gap of size `2` separating them).
- If the user fails to provide a positive integer no greater than `8`, you should re-prompt for the same again.
- Then, generate (with the help of `print` and one or more loops) the desired half-pyramids.
- Take care to align the bottom-left corner of your pyramid with the left-hand edge of your terminal window, and ensure that there are two spaces between the two pyramids, and that there are no additional spaces after the last set of hashes on each row.

How to Test

While `check50` is available for this problem, you're encouraged to first test your code on your own for each of the following.

- Run your program as `python mario.py` and wait for a prompt for input. Type in `-1` and press enter. Your program should reject this input as invalid, as by re-prompting the user to type in another number.
- Run your program as `python mario.py` and wait for a prompt for input. Type in `0` and press enter. Your program should reject this input as invalid, as by re-prompting the user to type in another number.

- Run your program as `python mario.py` and wait for a prompt for input. Type in `1` and press enter. Your program should generate the below output. Be sure that the pyramid is aligned to the bottom-left corner of your terminal, and that there are no extra spaces at the end of each line.

```
# #
```

- Run your program as `python mario.py` and wait for a prompt for input. Type in `2` and press enter. Your program should generate the below output. Be sure that the pyramid is aligned to the bottom-left corner of your terminal, and that there are no extra spaces at the end of each line.

```
# #
## ##
```

- Run your program as `python mario.py` and wait for a prompt for input. Type in `8` and press enter. Your program should generate the below output. Be sure that the pyramid is aligned to the bottom-left corner of your terminal, and that there are no extra spaces at the end of each line.

```
  # #
  ## ##
 ### ###
#### ####
##### #####
##### #####
##### #####
##### #####
##### #####
```

- Run your program as `python mario.py` and wait for a prompt for input. Type in `9` and press enter. Your program should reject this input as invalid, as by re-prompting the user to type in another number. Then, type in `2` and press enter. Your program should generate the below output. Be sure that the pyramid is aligned to the bottom-left corner of your terminal, and that there are no extra spaces at the end of each line.

```
# #
## ##
```

- Run your program as `python mario.py` and wait for a prompt for input. Type in `foo` and press enter. Your program should reject this input as invalid, as by re-prompting the user to type in another number.
- Run your program as `python mario.py` and wait for a prompt for input. Do not type anything, and press enter. Your program should reject this input as invalid, as by re-prompting the user to type in another number.

Correctness

```
check50 cs50/problems/2024/x/sentimental/mario/more
```

Style

```
style50 mario.py
```

How to Submit

```
submit50 cs50/problems/2024/x/sentimental/mario/more
```

Why does my submission pass check50, but shows “No results” in my Gradebook after running submit50?

In some cases, `submit50` may not grade the assignment due to inconsistent formatting in your `mario.py` file. To fix this issue, run `black mario.py` in the `sentimental-mario-more` folder. Address any issues that are revealed. Run `check50` again to ensure your submission still functions. Finally, run the `submit50` command above again. Your result will appear in your **Gradebook (<https://cs50.me/cs50x>)** within a few minutes.

Please note that if there is a numerical score next to your mario submission in the `submissions` area of your **Gradebook (<https://cs50.me/cs50x>)**, the procedure discussed above does not apply to you. Likely, you have not fully addressed the requirements of the problem set and should rely upon `check50` for clues as to what work remains.