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-less`, 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:
```

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.
- 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-pyramid.
- Take care to align the bottom-left corner of your half-pyramid with the left-hand edge of your terminal window.

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/less
```

Style

```
style50 mario.py
```

How to Submit

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

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-less` 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.