

This is CS50x

OpenCourseWare

David J. Malan (<https://cs.harvard.edu/malan/>)

malan@harvard.edu

[f](https://www.facebook.com/dmalan/) (<https://www.facebook.com/dmalan/>) [G](https://github.com/dmalan/) (<https://github.com/dmalan/>) [@](https://www.instagram.com/davidjmalan/) (<https://www.instagram.com/davidjmalan/>) [in](https://www.linkedin.com/in/malan/)

(<https://www.linkedin.com/in/malan/>) [Q](https://www.quora.com/profile/David-J-Malan) (<https://www.quora.com/profile/David-J-Malan>) [T](https://twitter.com/davidjmalan) (<https://twitter.com/davidjmalan>)

Mario



Implement a program that prints out a half-pyramid of a specified height, per the below.

```
$ ./mario
Height: 4
#
##
###
####
```

Specification

- Write, in a file called `mario.py` in `~/pset6/mario/less/`, a program that recreates the half-pyramid using hashes (`#`) for blocks, exactly as you did in [Problem Set 1](#), except that your program this time should be written (a) in Python and (b) in CS50 IDE.
- 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.

Usage

Your program should behave per the example below.

```
$ ./mario
Height: 4
#
##
###
####
```

Testing

No `check50` for this problem, but be sure to test your code for each of the following

NO `check50` for this problem, but be sure to test your code 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.

How to Submit

Execute the below, logging in with your GitHub username and password when prompted. For security, you'll see asterisks (`*`) instead of the actual characters in your password.

```
submit50 cs50/problems/2020/x/sentimental/mario/less
```

