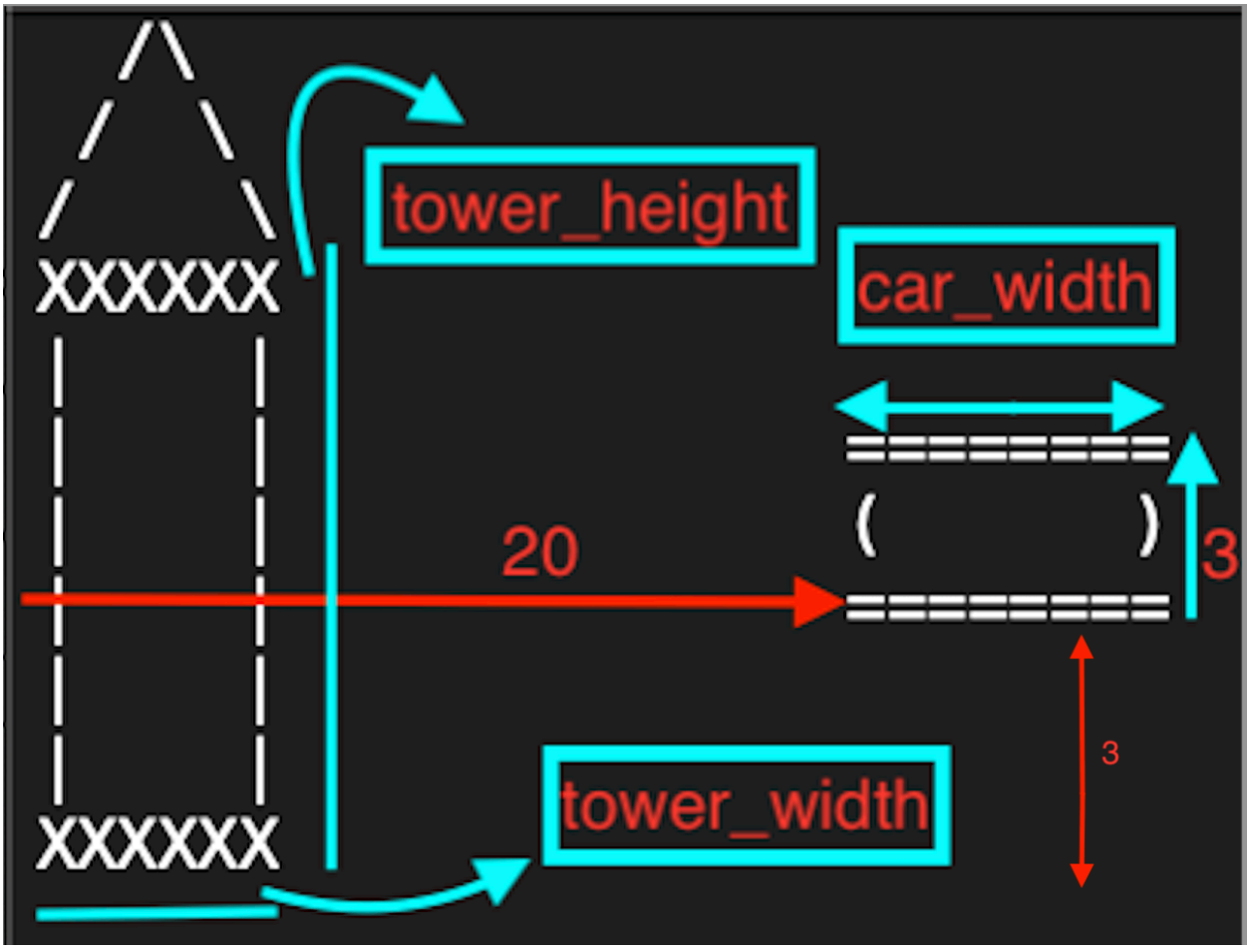
Homework 2 - Car passing Galata

Description

In this homework, you are expected to write a code, which prints out “pictures” (in text format) of an event, frame by frame.

Galata Tower will be at the left side and the car will start on the right, moving 1 character left at each frame and eventually pass in front of the tower and out of the picture. Printing will stop after the car leaves the screen. (The last frame will be the only frame which does not contain the car.)

Some parameters are fixed, and some will be taken as input by the code.



Input

3 parameters with exactly these names will be taken as input,

-tower_width

-tower_height

-car_width

You can use the prompts I wrote in the ".py" file, you don't need to do anything extra in your code to take input.

Drawing the picture

Tower

- Its body is defined by 2 of the 3 inputs, tower_width and tower_height
- Horizontal lines at its ends will be drawn with "X"
- Vertical lines of its body, with "|"
- Tower's head is a triangle, drawn with "\" and "/"
- Height of the head will always be equal to half of the tower's width

Car

- Car's width is 1 of the 3 inputs, named as car_width
- It will have height of 3 characters
- Car's horizontal lines at its ends will be drawn with "="
- It's vertical lines at right and left side will be drawn with "(", ")"

Frames

- Between each frame the code will print an empty line
- Tower will be drawn on the left most, fully visible at each frame

- Car’s location will be 20 characters from left end and 3 characters up from down end
    - 3 char distance from the ground will stay the same
    - 20 char distance from left end will decrease 1 by 1 at each frame, until it is out
- When the car and the tower corresponds to same characters, code will draw car since it is in front of the tower.
- You can inspect example outputs named with the input values in the same order with your code file.

Constraints on input

You can expect the following statements to be true about the input:

- all of the inputs will always be integers > 0
- tower_width will always be even
- tower_height + tower_width/2 will always be ≥ 6
- car_width will always be ≥ 2

Submission Details

When you finished this homework, it should be printing the frames same as the examples provided. After that, just name your “.py” file in the format “YOURSTUDENTNUMBER_HW2.py”, upload and submit it to the moodle page of the homework.