

Homework 2
CS Fundamentals: Scratch Review [due Tuesday]
June 21, 2017

1 Review: Doodle Jump Pt. 2 [Expected Duration: 15 - 60 min]

If you have any questions about the directions or any blocks you have not used before, let me know via email or text!

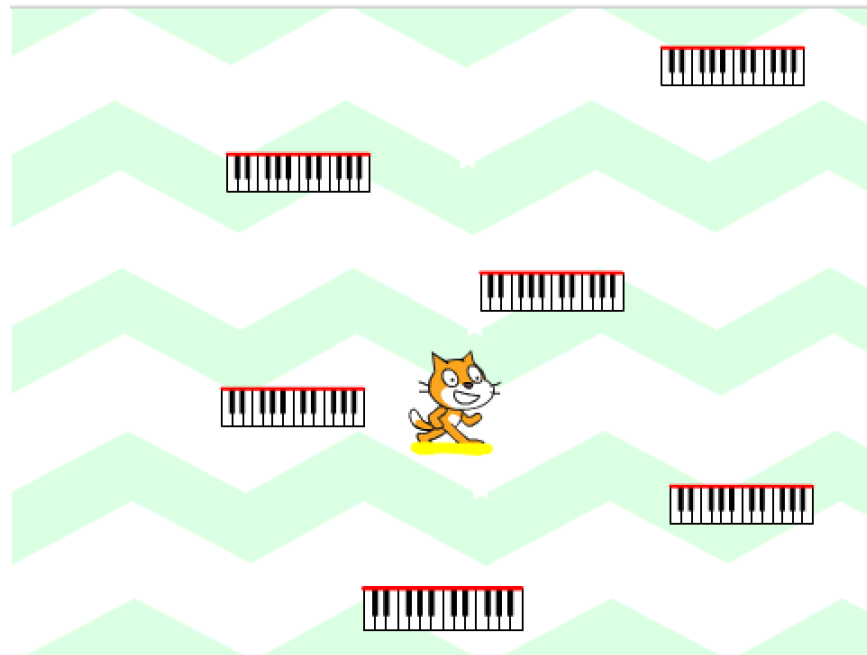
Although we will not be working on anything on Sketch for today, I would **strongly recommend installing the [offline version of Scratch 2](#)** for future projects.

[Click this line to see a YouTube video of this game running!](#)

In the last lesson, we went over the code that we built together. For homework, I want you to describe what is happening in each block shown below. There will be code labeled. I want you to use the **word bank** below to complete this assignment. Note that **the words in the word bank is used exactly once... all words are used**.

If you have any questions regarding the terms in the word bank, **please** let me know!

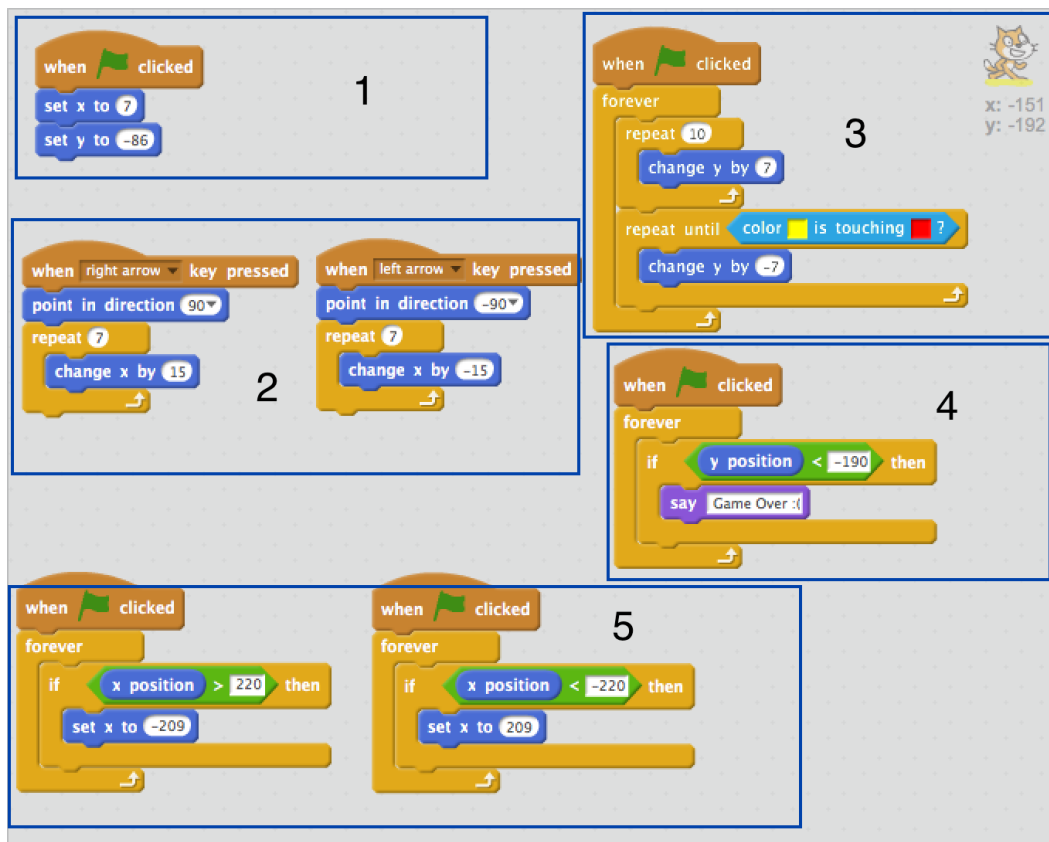
You may find the preview of the game useful.



Do your best and have fun!

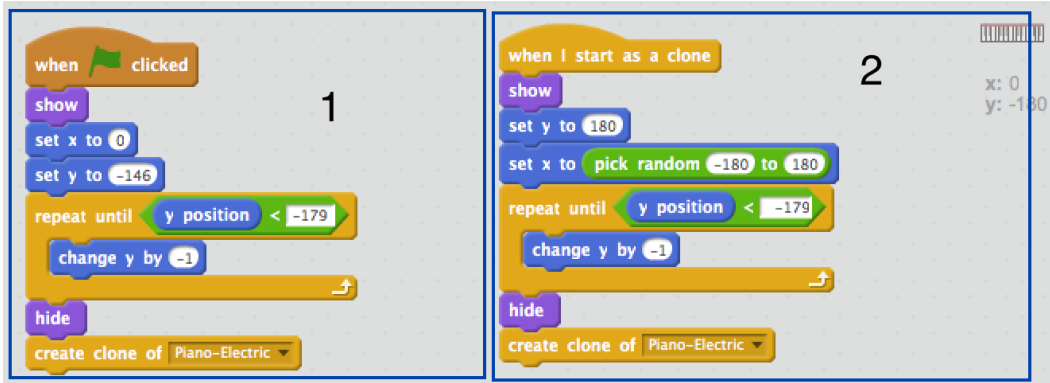
Word Bank:

-180	180	bottom	bottom edge
clone	clone	direction	down
edge	endless	endless	fall
hides	initial	jump	jump
key	left	position	red
shows	smooth	up	yellow



1. The Cat
 - a. Block 1 sets the _____ position of the Cat.
 - b. Block 2 changes the _____ of the cat based on the _____ pressed.
 - c. In Block 2, we repeat changing the x value 7 times because we want to show a [smooth] transition from one position to another.
 - d. In Block 3, we loop a few code blocks forever because we want the cat to _____ forever.

- e. In Block 3, where we repeat change y by 7 10 times, the cat is going _____.
- f. In Block 3, where we repeat change y by -7 until color yellow is touching red, the cat is going _____.
- g. In Block 3, the “color yellow is touching red” is a condition for when the cat’s _____ feet touching the piano tile’s _____ top.
- h. Block 4 tells the player that the game is over when the Cat touches the _____ edge of the screen.
- i. Block 5 lets the user go to the _____ edge of the screen to appear in the right, and vice versa.
- j. In Block 5, we set the x value to 209 instead of around 220 because the cat may end up getting stuck on the _____ of the screen.



1. The Tiles

- a. Block 1 sets the initial _____ of the tile, then makes the tile _____ until the tile reaches the _____ of the screen, then _____ the piano tile, and finally creates a _____ of the Piano Tile.
- b. In Block 1, we hide the piano block so that the cat will no longer be able to _____ on the tiles that already hit the bottom of the screen.
- c. In Block 1, we create a clone of the Piano Tile so that this game will be _____.
- d. Block 2 first _____ the piano tile, then sets the y position of the piano tile to be at the _____ of the screen, then sets the x position of the piano tile to be anywhere between _____ to _____.
- e. At the end of Block 2, we _____ the Piano Tile again so that the game will continue to be _____.