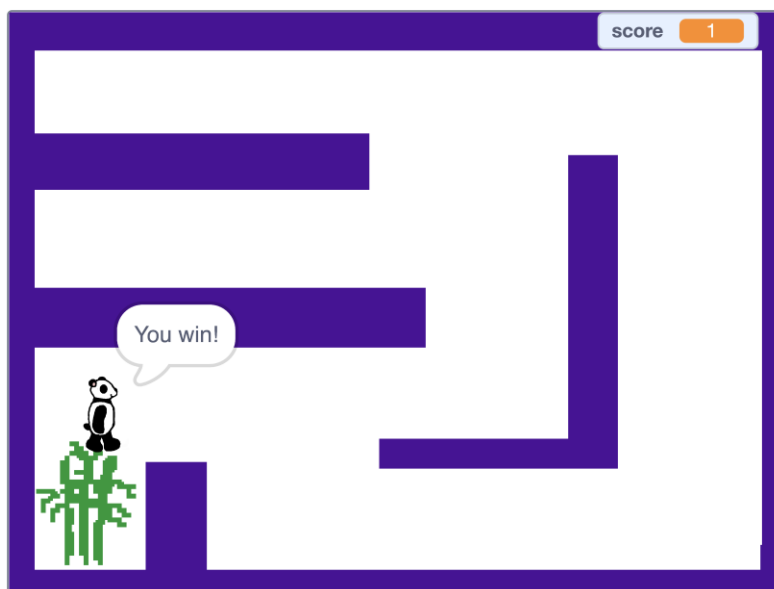


SCRATCH MAZE GAME

LET'S LEARN TO MAKE A GAME WITH SCRATCH!

In this game, you will guide the panda to its bamboo forest with your keyboard, and prevent it hitting the wall of the maze. You will earn 1 point if you reach the goal and lose 1 point if you hit a wall.

In Part 1, you will learn how to control the panda's movements with arrow keys on your keyboard.



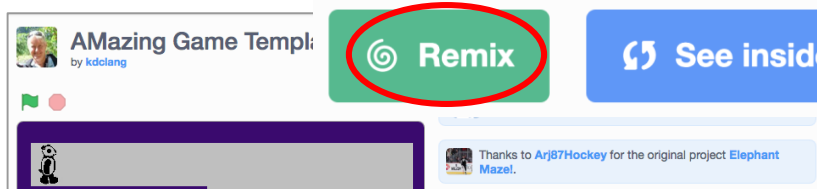
START HERE

Sign into your account at scratch.mit.edu

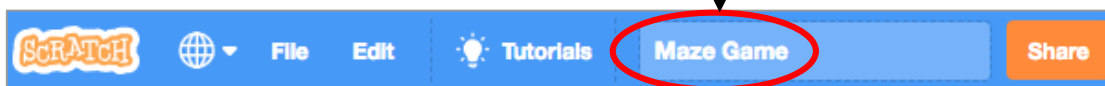
1

Open the Maze Game Template project:
<https://scratch.mit.edu/projects/222153103>
and click on the "Remix" button.

2



Rename the project as "Maze Game".



3

SCRATCH MAZE GAME

MOVING THE PANDA

- ❑ We are now going to make the sprite move with keyboard presses. Go back to the **Code** tab and select the Panda sprite.
- ❑ Go to the **Events** drawer under **Code** tab and drag out four **when space key pressed** blocks onto the coding area.
- ❑ For each of the four blocks, change the **space** key entry to **up arrow**, **down arrow**, **left arrow** and **right arrow**.

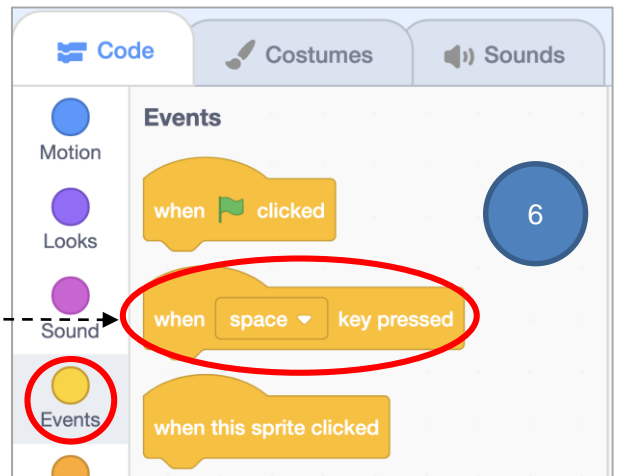
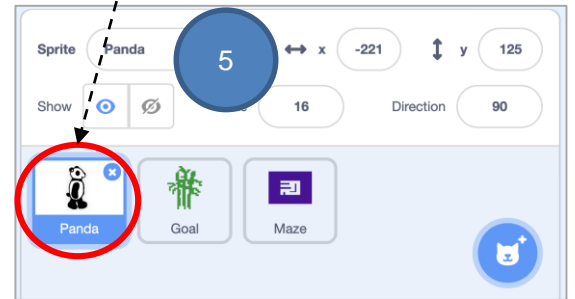
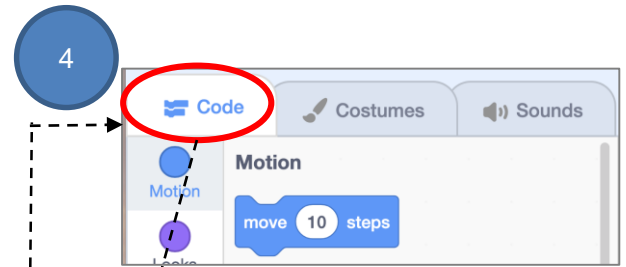
7



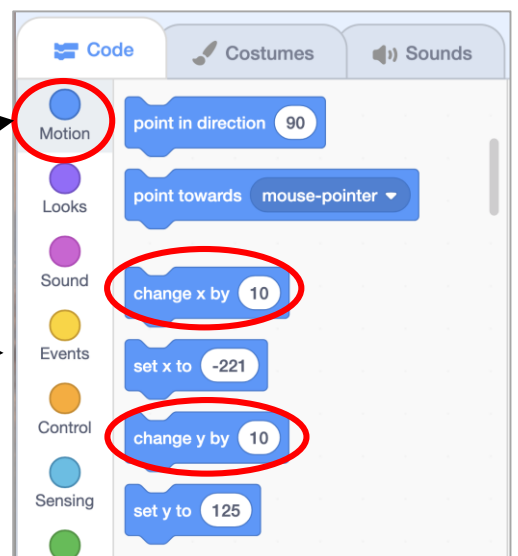
- ❑ To make the sprite move when the keys are pressed, use blocks from the **Motion** drawer. You will need to use the **change x by #** and **change y by #** blocks.

➤ Try to figure out which block and number (10 or -10) goes under which key event.

CT Tips
Pressing the keys are **events** that control where the sprite moves.



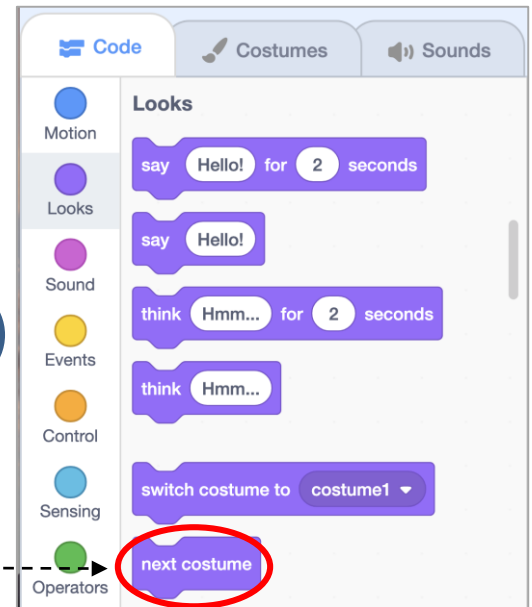
8



SCRATCH MAZE GAME

ALMOST DONE!

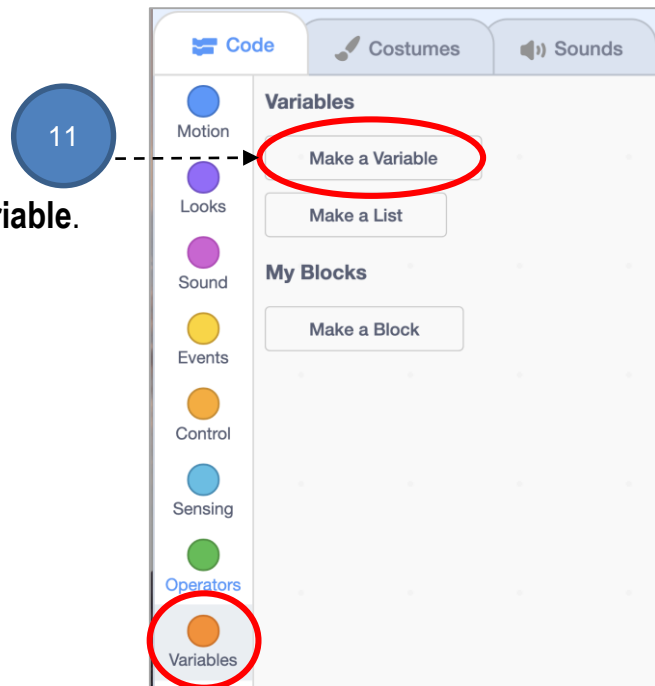
- ❑ How would you change the sprite's costume to make it look like it is walking?
Hint: Think about using the **next costume** block.



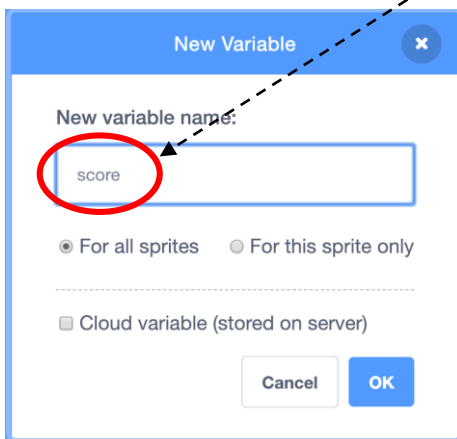
- ❑ Make your sprite go to your desired starting coordinates when the green flag is clicked.



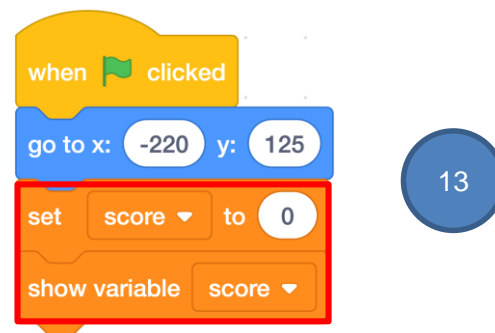
- ❑ To add a variable for recording the score, go to the **Variables** drawer and click **Make a Variable**.



- ❑ Name the new variable as **score**.



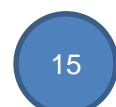
- ❑ Drag **set score to 0** and **show variable score** blocks to **when the green flag is clicked** block.



- ❑ Play your game. What works? What doesn't? Discuss with your teacher and your classmates.



- ❑ Save your project by clicking **Save now** under the **File** menu.



SCRATCH MAZE GAME

COMPUTATIONAL THINKING CONCEPTS

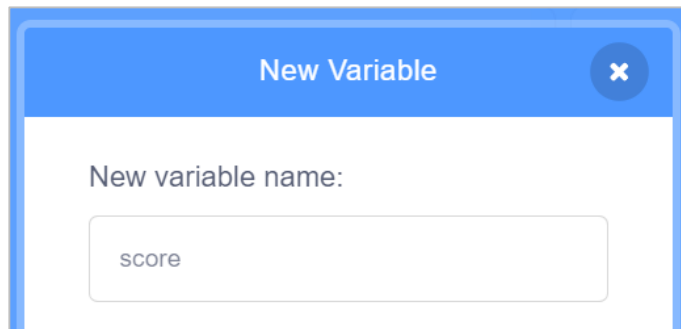
The following are the computational thinking concepts learnt in Lesson 1.

L1U8.3 Making a Maze Game with Scratch

1. Events:



2. Naming:



3. Manipulation of data and elementary data structures:

