

ROOM ESCAPE

<http://scratch.mit.edu/projects/30428650/#editor>

Can you solve the puzzles and find the secret codes to escape the room? Room Escape games are about solving puzzles and exploring to figure out how to escape a room.

The program has four main sprites—the clock, the painting, the books, and the door—one for each puzzle. When you solve a puzzle, the sprite should disappear, revealing a secret underneath. There are also nine optional sprites for the combination numbers.

Finished game: <http://scratch.mit.edu/projects/30367666/>



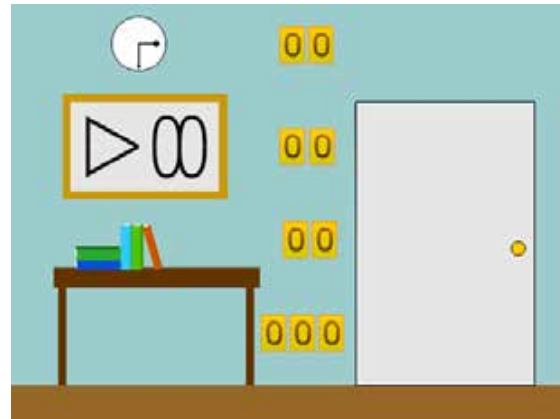
#1. BOOKS // MEDIUM

Let's start with the book puzzle. The secret code for the books puzzle is 23.



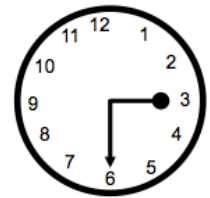
The reason is that there are two books lying sideways and three books standing up. You can ask someone for the secret code using this block: `ask` What is the secret code? `and wait`.

You can check the answer they give using `=`. If the answer is correct, you should `hide` the books. When the green flag is clicked to start the game, you should make the books sprite `show` or people will see the secret code underneath!



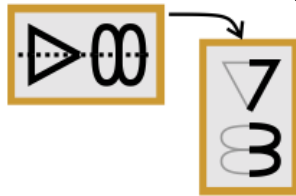
#3. CLOCK // MEDIUM

The hands of the clock are pointing at the numbers 3 and 6. The secret code for the clock puzzle is 36. Write the program for the clock puzzle.



#2. PAINTING // MEDIUM

When you draw a line through the middle of the painting, you will see the numbers 7 and 3. The secret code for the painting is 73. Just like the books, write a program that asks for a secret code and disappears if they are correct.



#4. DOOR // MEDIUM

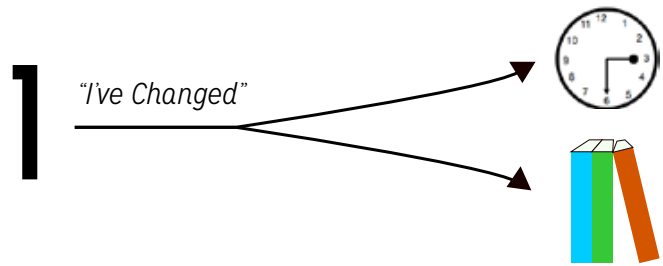
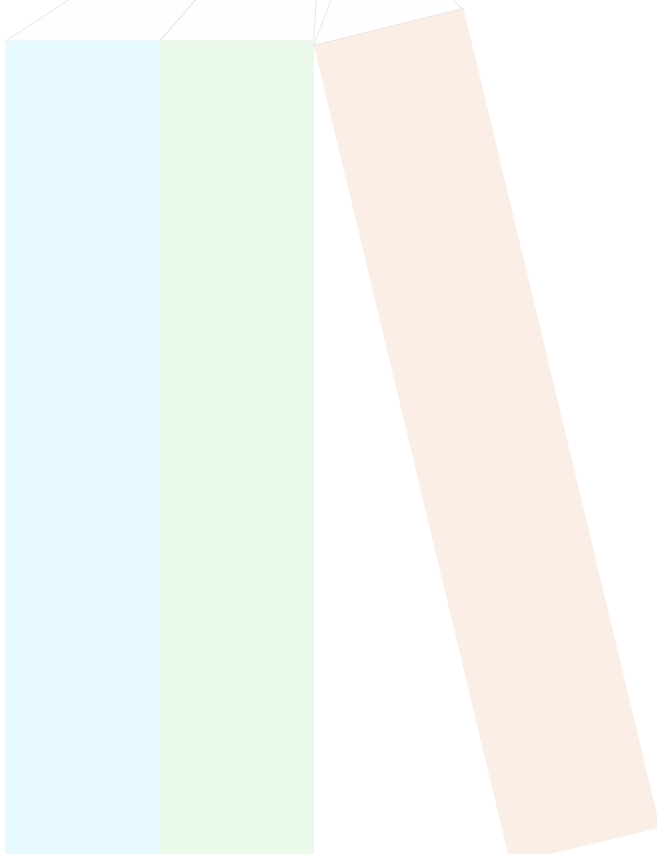
When you solve the books, painting, and clock puzzle, you will find the three secret numbers 8, 5, and 1. Write a program for the door that will ask you for the secret code if you click on it. If you get the right answer, the door should disappear.

TRY IT: COMBINATION LOCK // MEDIUM

Instead of typing in the secret codes, let's use the combination locks to enter in the code instead. Click on one of the sprites for the combinations, and then click on the costumes tab.

There should be one costume for each number. You can switch a sprite's costume using this block: **next costume**. You should make sure that the code resets when you start the game using this block: **switch costume to 0**.

Once you get your program working for one sprite you can use the "Backpack" at the bottom of the screen to save code to use on other sprites.



TRY IT: CHECK THE COMBINATION // HARD

Now you need a way to check if the combinations are correct. First, the books, painting, clock, and door need to know when the combinations are being changed. To do this we can use the **broadcast combination changed** to tell the other sprites when this sprite's costume changes.

Other sprites can listen for this message using the **when I receive combination changed** block and check to see if the combination is right using the **costume name of clock number 1 = 3** block and **and**.

MORE IDEAS!

Try changing the puzzle sprites to have different answers. Or try making entirely new puzzles for the game!