

MakeCode Arcade Platform Game, Part II



Challenge Level

Functions are groups of code for a specific task that can be called at anytime. Functions are found in the *Advanced* toolbox and built like variables.

^ Advanced
↻ Animation
🖼 Images
f(x) Functions

Creating Multiple Levels Using a Function and Conditional Statement

Conditional: go to the *Logic* toolbox and then add an **[if <true> then]** to have the program check the level and call up the matching tilemap

```
function nextlevel ⤴  
  set myCharacter position to x 10 y 220  
  set life to 1  
  if level = 1 then  
    set tilemap to tilemap  
  else if level = 2 then  
    set tilemap to tilemap  
  else  
    game over WIN with confetti effect  
  +
```

Embedding One Block in Another

1. Place an **[if <true> else]** block from the *Logic* toolbox.

if true then

2. In the *Logic* toolbox, look for Comparison and drag the **<0 = 0>** block to the right.

Comparison
0 = 0

3. Drag the **<0 = 0>** block over the **<true>** block to replace it.

if 0 = 0 then

4. Place your **(level)** variable from *Variables*, Your Variables over the first zero to replace it and enter the level number in the second bubble.

level = 1

```
on sprite of kind Player overlaps otherSprite of kind Trigger  
  destroy otherSprite +  
  set ghost to sprite of kind Enemy  
  set ghost position to x myCharacter x + 100 y myCharacter y + 100  
  set ghost follow myCharacter +
```

Chasing a Character

1. In the *Math* toolbox, add the **(0 + 0)** block in the x and y parameter bubbles.

0 + 0

2. In *Sprites*, look for *Physics* and drag the **(mySprite [x])** block into the first zero bubble in the previous blocks. Repeat this for the y parameter and change to **(mySprite [y])**.

mySprite x

3. Adjust the second set of zeros to customize the initial buffer between the enemy and player. 100 is a good starting place.