

# Art and Code | FWCD

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## Animation

### Objective

To use conditional statements to draw different states of a sketch.

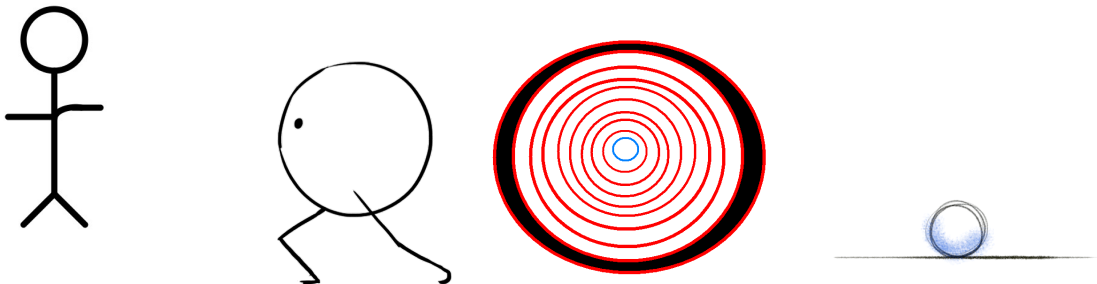
### Instructions

Create an animation by drawing the same sketch in different states. This is much like a flip book...only digital. A state machine is a mathematical abstraction used to design algorithms. When an input is this, the output is this. Animation is an example of a state machine. Depending on what frame your display is in, we can draw a completely different sketch. These sketches can be used to bring our sketches to life.

<pre>if (frame == 1){     //draw state 1 } else if (frame == 2){     //draw state 2 } etc..</pre>	OR	<pre>if (frameCount % numOfStates == 0){     //draw state 1 } else if (frameCount % numOfStates == 1){     //draw state 2 } etc..</pre>
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By adjusting `frameRate()`, your animation can change quickly and often. The more states you have, the more detailed your animation will be. You need at least 5 states, but utilize copy and paste to make more!

### Examples



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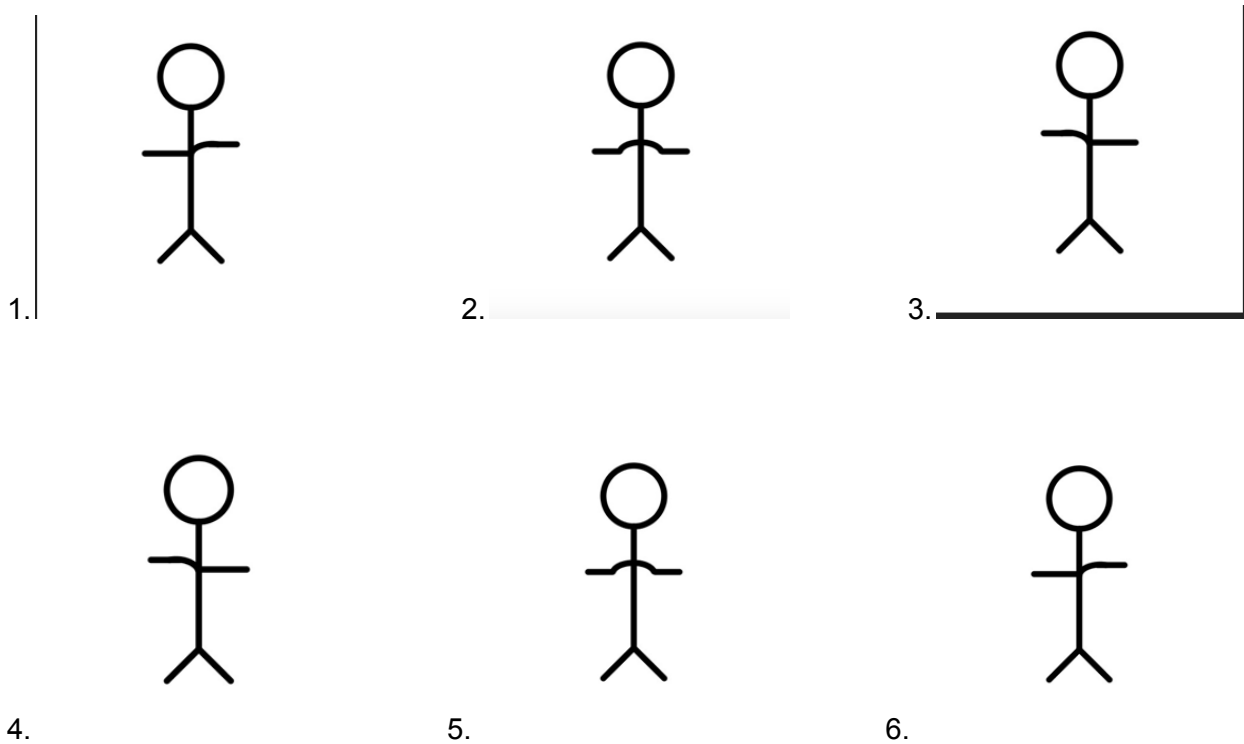
## Animation

You may also use an image, but the states you use must be drawn on the image.



## Hints

Keep either the image or the part of the image that you intend to move simple.



## *Animation*

### **Challenge**

You can have your image move on the screen or you can have it stand still and move the background of the screen. You know how to move a ball and how to draw images based on an anchor point. Have fun!