

Variables and Graphics







Discussion

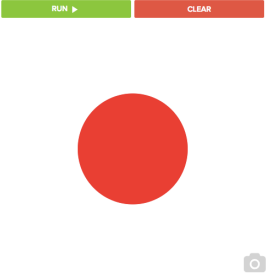
We use variables to store values in our code that can be used and altered throughout our program. Using variables instead of static values makes our code more reusable so we can solve multiple problems by simply changing a variable's value instead of changing our commands.

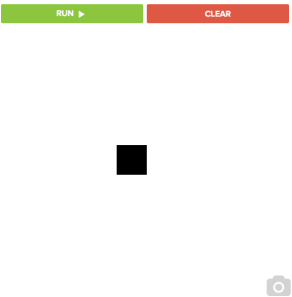
Class Exercise

Below, you'll find multiple scenarios. Your job is to write one program that can be used to solve all the altered programs where the only value changing is the variable and/or the mathematical equation altering the variable.

Write the main program in the box below and write the alterations that would need to be made inside each alteration box. Make sure to look at all alteration programs before writing your main code!

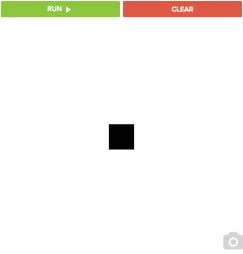
<p style="text-align: center;">Scenario 1</p> <p>Black circle with radius 100 with center located at (200,200)</p> <div style="text-align: center; margin: 10px 0;"> RUN ▶ CLEAR </div> <div style="text-align: center; margin: 20px 0;">  </div> <div style="text-align: right; margin-top: 10px;">  </div>	<p>Main Code:</p>	
<p style="text-align: center;">Alteration 1</p> <p>Blue circle with radius 100 with center located at (200,200)</p>	<div style="text-align: center; margin: 10px 0;"> RUN ▶ CLEAR </div> <div style="text-align: center; margin: 20px 0;">  </div> <div style="text-align: right; margin-top: 10px;">  </div>	<p>Alterations to main code:</p>
<p style="text-align: center;">Alteration 2</p> <p>Black circle with radius 50 with center located at (50,50)</p>	<div style="text-align: center; margin: 10px 0;"> RUN ▶ CLEAR </div> <div style="text-align: center; margin: 20px 0;">  </div> <div style="text-align: right; margin-top: 10px;">  </div>	<p>Alterations to main code:</p>

<p>Alteration 3 Red circle with radius 100 centered on canvas</p>		<p>Alterations to main code:</p>
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<p>Scenario 2 Square with sides of length 50, drawn from position (200, 200)</p> 	<p>Main Code:</p>
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<p>Alteration 1 Square with sides of length 50, drawn from position (100,50)</p>		<p>Alterations to main code:</p>
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<p>Alteration 2 Rectangle with height of 100 and width of 200, drawn from position (200,200)</p>		<p>Alterations to main code:</p>
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<p>Alteration 3 Square with sides of length 50, drawn in the center of the canvas</p>		<p>Alterations to main code:</p>
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