

# Review of Working with Pictures

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1. Integers: Positive, Negative or Zero numbers
2. Colors: Contains integers between 0 and 255 for each of Red, Green and Blue.
3. Pixels: Contains a color and a location
4. Pictures: Contains a Matrix of Pixels
5. Also Strings and Floats, but not critical for picture manipulation

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2. passed variables inside () after name
3. can pass information outside of function using "return" keyword

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2. Functions don't see Interaction Area variables
3. Interaction Area doesn't see function variables

# Writing Programs: What you should ask yourself

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3. What does your function outputs?
4. What are you required to change?
5. What are you required to not change?

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  - 2.1 What gets passed into the program?
  - 2.2 Start thinking about how these variables will be used

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  - 1.2 If so, How am I going to calculate that value?
2. What are you required to change?
  - 2.1 Are there changes I must make to an object passed to the function?
  - 2.2 If so, How do I go about making those changes?

# Writing Programs: Beginning to answer the questions

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1. What am I not allowed to change?
  - 1.1 Are there any variables I cannot change?

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## 3

1. What am I not allowed to change?
  - 1.1 Are there any variables I cannot change?
  - 1.2 I must ensure I only read these variables (i.e. get) and never use set

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2. `getColor`, `getRed`, `getBlue`, `getGreen`
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4. Addition(+), Subtraction(-), Multiplication(\*)

# Writing Program: One other tool, composition

1. Can write helper functions that do a specific subtask.



## Writing Program: One other tool, composition

1. Can write helper functions that do a specific subtask.
2. In the assignment you are guided towards this by being required to write the helper functions.