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| **Date Assigned: 9/30/16** | **Date Due: 10/4/16** |
| **Unit:** Methodology | **Turn In List:** **1. Terms** |
| *“I will vow to format code so that it is readable and easy to interpret. Good developers don’t try to hide things in source code.”* | |

**Conditions and Formatting Code: Using proper format while introducing conditions in code**

**Content Objectives:** Students will be able to identify and format code appropriately while using appropriate methods with return values.

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| **Starter Activity** |
| Modify the Etch-A-Sketch program to respond to keyboard interaction using the following:  void keyPressed() {  if(key ==CODED) {  println(keyCode);  if(keyCode == RIGHT) {  moveRight(1);  }else if(keyCode == DOWN) {  moveDown(1);  }else if(keyCode == LEFT) {  moveLeft(1);  }else if(keyCode == UP) {  moveUp(1);  }  }  }  or  void draw() {  if (keyPressed) {  if (key == 'b' || key == 'B') {  fill(0);  }  }  } |
| Students will save 3 images using the following code:  void mouseClicked() {  saveFrame("line-######.png");  } |

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| **Key Terms:** | |
| White Space | Any thing like a space or a tab that gives nothing in the spade |
| Camel or Pascal Case | Camel: Naming methods have lowercase character for first word then uppercase for the rest. Pascal Case: renders space key as something else like underscore |
| Condition | If or switch block stops code to ask question |
| If | question |
| If else | Used for complex question else is a catch all |
| Boolean Expression | True or false statement |
| Boolean Variable | One bit of info |

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| **Assignment:** |
| Students will explore methods with a return type. Consider the following:  C = (F – 32) \* (5 / 9)  \_\_\_\_\_\_ tempConverter(float \_\_\_\_\_\_\_\_) {  \_\_\_\_\_ \_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  }  Answer: |
| For this assignment students will create a conversion app that utilizes a method with a return value and the position of the mouse or a line on the screen controlled by the keyboard (or both). Make sure to include the following:   * Title and developer info (your name) * Onscreen instructions * Reference line or shape * Numbered increments and tic marks on screen (hint: use loop) * Updated total as the mouse moves or the arrow keys are pressed   Appropriate conversions may include any of the following:   * Any distance measurement i.e. miles to km etc. * Any volume measurement * Any currency conversion * Math functions i.e. squares or squareroots * Etc. |

Notes (Points of interest, mistakes, lessons learned, web resources, and thoughts):

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