# Title: Coding - Lesson 1: Output, Input and Variables

| Context of the Activity | |
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| **The Big Idea**: Learning the foundations of coding | |
| Prerequisite Knowledge and Skills:<br>● An account on Scratch https://scratch.mit.edu | Connections to SOLs:<br>CS K.1-2 CS 3.1 - 3<br>CS 1.1-3 CS 4.1 - 3<br>CS 2.1-3 CS 5.1 - 3 |
| **Materials** | |
| ● Slides - http://bit.ly/2xayOs7 | ● Copy of the Tools of Programming http://bit.ly/csTools |
| **Lesson Structure and Activities** | |
| **Warm Up *[10 min]*** :Opener:<br>● Have teachers log into their Scratch accounts<br>● Open the starter program: https://scratch.mit.edu/projects/225382471/<br>○ Run the program by clicking the  icon<br>○ Change the program: follow the steps in the slides | |
| **Launch (Engage) *[10min]*** :Teacher Directed Instruction:<br>● Define - output (see slides)<br>○ Prompt - what examples of output did we see in this program?<br>● Lab lecture - see slides - walk the teacher through using input and variables | |
| **Explore *[20min]*** :Joint/Guided Practice \| Student Practice:<br>● Do practice exercises - encourage folks to pick their level - *mild, medium or spicy*<br>● Link: http://bit.ly/2suGOzk | |
| **Summarize *[15min]*** :Debrief :<br>● Journal: How does the computer science content in this lesson relate to topics you already teach?<br>● Think - pair - share discussion | |