

Main objective: Lightbot will introduce you to the idea of programming and problem solving from what is given, to what is required and the necessary transformations.

Website: <http://lightbot.com/hour-of-code.html>






Part 1: The Basics

In the basics, you learn how to move, turn, and light up tiles.

Record your solutions to each level below

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What does each of the following commands do?



Part 2: Procedures (Methods)

Depending on the programming language, procedures are also known as subprograms, functions, methods or subroutines.

Record your solutions to each level below

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What does each of the following commands do?

What is a procedure?

What are the advantages of creating a procedure?

When you are programming, how do you know that you will need to use a procedure?

Since procedures can call other procedures, why do we need a main program?

Explain the interaction between the main program and the procedures?

Part 3: Loops

There are two main ways to do loops in programming. The first is iteration and the second is recursion. *Lightbot does loops via recursion.*

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What is a recursion?

How do we make recursion in our program?

When should we use recursion?