

Problem Set 1, Problems 0 and 1

Problem 0: Reading and response

Put your response to the reading below.

In my opinion, a model is not unlike an algorithm. A scientific model allows scientists to break down complexities into an easy to understand tool that enables them to make predictions and solve new problems. An algorithm is a series of instructions designed to solve a problem. To say that models are useless and not necessary is like saying algorithms bear no merit in the world of computer science. In reality, without algorithms, or models, with which to build our programs, our computers wouldn't even be able to do arithmetic. While models may not be necessary in every facet of the world, to say that we don't have to settle for them is an incorrect line of thought.

Problem 1: Boolean expressions and conditional execution

1-1. Boolean expressions

a) `not (a == (3*b)+2)`

b) `a%3 == 0`

c) `a<6 or a>16`

1-2. Conditional execution: Calls to the function `mystery()`

function call	output
a. <code>mystery([3, 3, 3])</code>	mow dow row
b. <code>mystery([3, 4, 5])</code>	tow row
c. <code>mystery([5, 3, 2])</code>	mow row
d. <code>mystery([5, 5, 7])</code>	now how row
e. <code>mystery([6, 4, 6])</code>	bow row
f. <code>mystery([2, 4, 1])</code>	wow row