Problem Set 1, Problems 0 and 1

Problem 0: Reading and response
Put your response to the reading below.

I disagree with the thought of not needing models. Despite the amazing computing power of computers, they can only calculate and work with values. As of now, it is up to humans to conjure up the systems and laws by which computers have to abide their calculations. In other words, it is still up to the humans behind the machine to use their imagination to discover how the world works and to create a simpler way of looking at the properties of nature. However, the human mind is limited and it cannot grasp all of nature in its current state. Therefore, models are necessary to simplify nature's patterns and properties so that a human can understand them and work with them.

Problem 1: Statements, expressions and conditional execution

1-1. Tracing a simple program

`line of code`	`x`	`y`	`z`
`x = 11`	11		
`y = 5`	11	5	
`y = y * 3`	11	15	
`z = y - x`	11	15	4
`x = x // 3`	3	15	4
`y = z % 3`	3	1	4

1-2. Assignment statements and expressions

a)
```
a = a + 5
```

b)
```
b = b**a
```

c)
```
b = a / 3
```

d)
```
a == b
```

e)
```
a == (b % 3 == 0)
```

f)
```
b < 6 and b > 16
```

1-3. Conditional execution: Calls to the function `mystery()`

function call	**output**
a. `mystery([5, 7, 1])`	`mound` `redound`
b. `mystery([4, 4, 6])`	`round` `redound`
c. `mystery([8, 6, 3])`	`found` `redound`
d. `mystery([1, 2, 3])`	`zounds` `redound`

e. `mystery([2, 8, 8])`	`mound`
	`ground`
	`redound`