Answers to Questions from P1.2

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How many Counter objects were created?

 A total of <2>

Variables declared in main() are different to the objects created when we call new. What is the relationship between the declared variables in main and the objects created?

Variables <insert relationship> objects.
Declaring variables means evaluating them with objects we owned before, while creating them with new keywords means they have null value in the beginning.

Resetting the counter in myCounters[2] also changes the value of the counter in myCounters[0]. Why does this happen?

myCounter[2] and myCounter[0] […]
Because myCounters[2] is connected to the value of myCounters[0], which explains for the change of value after resetting myCounters[2].

The key difference between memory on the heap compared to the stack and the heap is that the heap holds dynamically allocated memory. What does this mean ?

Dynamic memory allocation means when heap store something, it will fully fill in space between nodes, instead of searching for different big space with appropriate storing size.

On which are objects allocated (heap or stack) ? On which are local variables allocated (heap or stack) ?

Objects are allocated on the [heap]
Local variables are allocated on the [stack]

What does the new() method do when called for a particular class What does it do and what does it return?

When new is called on a class it < *will create objects* > then it returns < *new reference* >

Draw a diagram showing the locations of the variables and objects in main.

Stack	Heap

	MyCounter()
	   0 2
	
	      Counter
	      -name
	      -value

Main Int i Counter myCounters	My Counter() 1 Counter -name -value