

Answers to Questions from P1.2

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How many Counter objects were created?

A total of 2 Counter Objects were created

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 <on the stack point to the object on the heap > objects.

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

myCounter[2] is the references to myCounter[0]. That mean when we change myCounter[2] it point to myCounter[0] and change myCounter[0] too'

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 try store something, it will find the blank space between nodes and fill it up, not looking for a whole big space that match the 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 ...creates a new instance of class, it allocates memory into the heap, then it returns Reference of it

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

