**Java Memory Management**

**Stack Memory**: Stack memory is a memory usage mechanism that allows the system memory to be used as ***temporary data storage that behaves as a first-in-last-out*.** It ***contains primitive values that are specific to a method and references to objects referred from the method*** that are in a heap.

**Heap Memory** : The Java heap is the area of memory used to store objects instantiated by applications running on the JVM. Objects in the heap can be shared between threads. Many users restrict the Java heap size to 2-8 GB in order to minimize garbage collection pauses.

**Difference between Stack and Heap** : Stack is used to store local variables, reference variables which belongs to objects in heap, and to store the order of method execution. Heap is used to store objects.

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**Passing variables by value** : when we pass a variable from main method to another method a copy of variable is created in stack and that copy is passed as a parameter to another method if we add or subtract on that variable it wont effect to the variable in main method.

**Garbage Collection** :

Any object on the heap which cannot be reached through a reference from the stack is “eligible for garbage collection”.

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