Garbage Collection

Student s; // static memory Allocaton

New Student(); // Dynamic memory Allocation

In Java:-

* In java destruction of object from memory is done automatically by the JVM.
* No delete keyword in java.
* When these is no reference to an object, then that object is assumed to be no longer needed and the memory occupied by the object are released.
* This technique is called Garbage Collection
* This is accomplished by the JVM.

JVM threads

* Whenever you run a java program, JVM creates three threads.
* Main thread
* Thread scheduler
* Garbage collector Thread
* In these three threads, main thread is a user thread and remaining two are daemon threads which run in background

Three Threads in Java

* The task if main thread is to execute the main method
* The task of thread scheduler is to schedule the threads
* The task of Garbage collector thread is to sweep out abandoned objects from the heap memory.

Garbage Collector Thread

Abandoned objects or dead objects are those objects which does not have live references.

Can not force Garbage Collection

* We can call Garbage Collector explicitly using System.gc() or RunTime.getRunTime().gc()
* But, it is just a request to Garbage Collector not a command
* It is up to Garbage Collector to honor this request .

Advantage force for Garbage Collection

Increases memory efficiency and decrees the changes for memory leak.

Finalize method

* Garbage collector thread before sweeping out an abandoned object, it calls finalize() method of that object
* After finalize() method is executed, object destroyed from the memory