

Dt : 20/7/2023

***imp**

JVM Architecture with Internals:

=>JVM stands for Java Virtual machine and which is used to execute Java Byte code and generate result.

=>JVM internally divided into three partions:

- 1.Class Loader SubSystem**
- 2.Runtime Data Area**
- 3.Execution Engine**

1.Class Loader SubSystem:

=>The Class Loader SubSystem will load class-file onto "Runtime Data Area" using internal loader.

2.Runtime Data Area:

=>Runtime Data Area internally divided into five partitions:

- (a)Method Area**
- (b)Heap Area**
- (c)Java Stack Area**
- (d)PC Register Area**
- (e)Native Method Area**

(a)Method Area:

=>The partition of Runtime data area where classes are loaded is known as Method Area.

=>while class loading static members will get the memory within the class.

=>Once main() method got the memory within the class,then it is automatically copied onto JavaStackArea to start execution process.

(b)Heap Area:

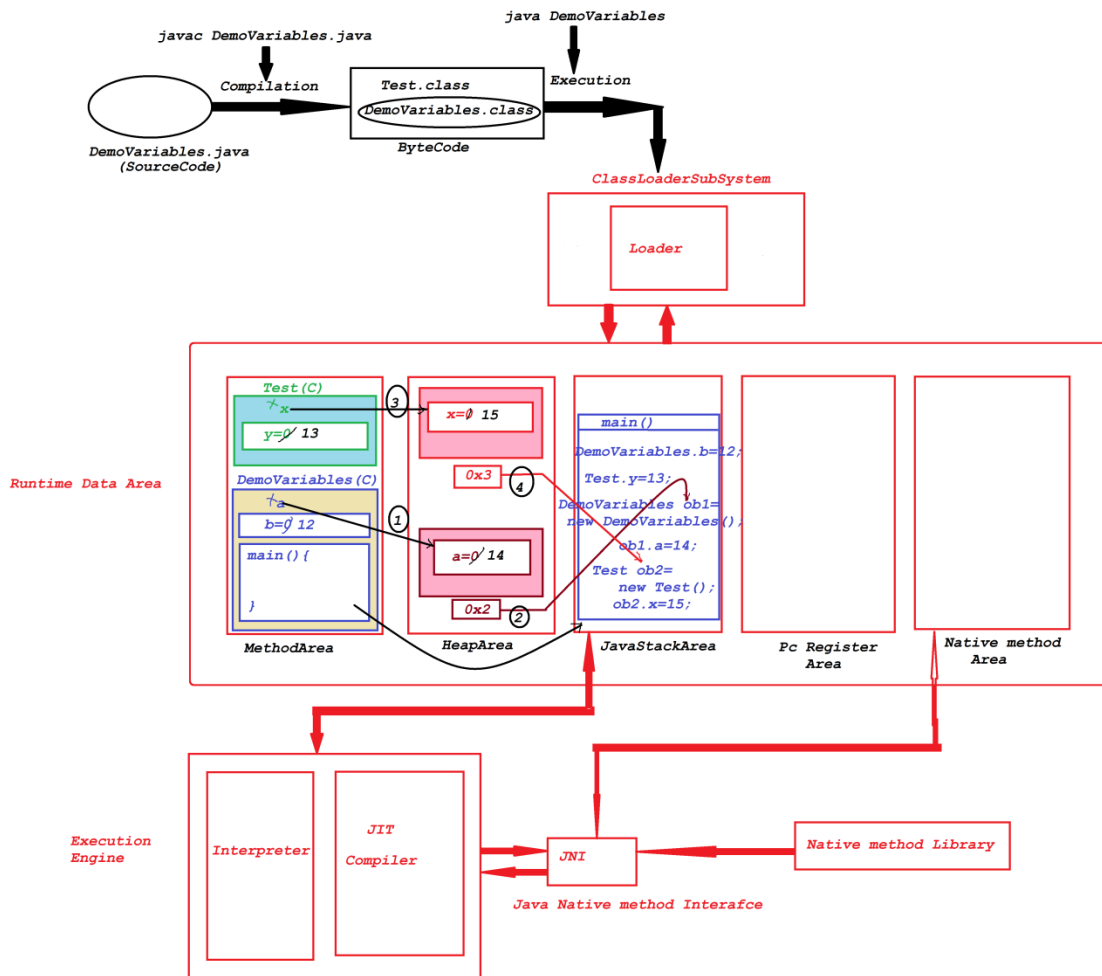
=>The partition of Runtime data area where objects are created is known as Heap Area.

(c)Java Stack Area:

=>The partition of Runtime data area where methods are executed is known as Java Stack Area.

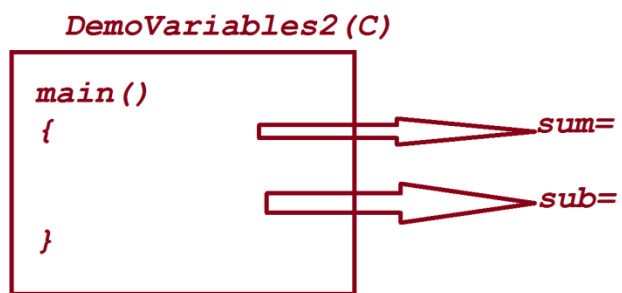
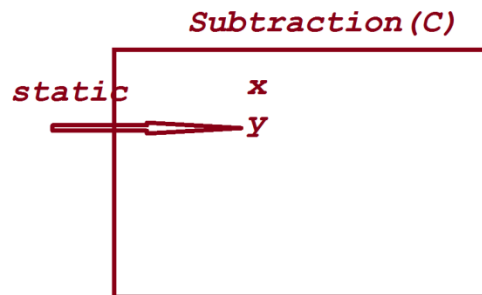
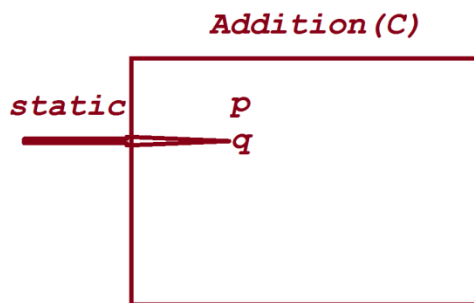
=>main() is the first method copied onto Java Stack Area to start execution process.

Diagram:



Assignment:

Construct the application from the following layout:



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