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How many types of memory areas are allocated by JVM?

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A powerful feature of the JVM is its efficient memory management. To achieve this, the JVM utilizes **five** memory areas.

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1 Method Area

Our classes, constructors, and methods need a dedicated place to be stored, static variables and static methods also but Before Java 8. This dedicated memory space is called the Method Area.

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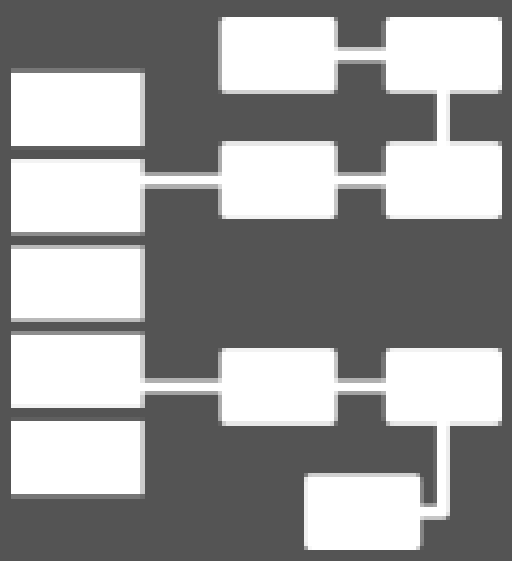
Heap Area 2

The Heap Area in the JVM is the memory space where all objects and instances are stored at runtime.



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3 Stack Area

The Stack Area in the JVM is used for storing local variables, method call information such a parameters, and stack will be created for each thread.

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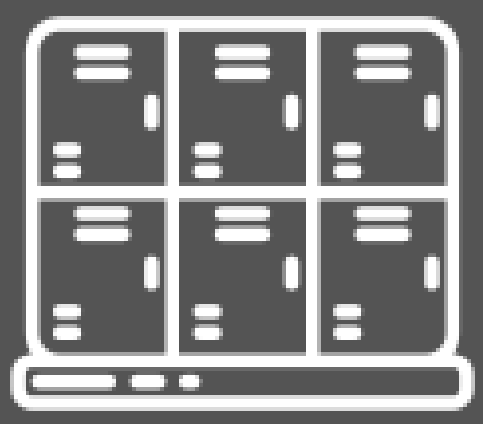
Program counter Area

4

The Program Counter (PC) Area in the JVM holds the address of the next instruction to be executed for each thread.



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5 Native method area

The Native Method Area in the JVM is a dedicated space for handling native methods written in languages like C or C++.

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By grouping all these memory areas —the Method Area, Heap, Stack Area, Program Counter Register, and Native Method Area— the JVM efficiently manages memory to enhance program performance.

No More **Confusion**

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