JVM homework

1.

What is the difference between the stack and heap memory areas allocated in JVM?

The difference between the stack and heap memory is the use by the application. Heap memory is used by all the parts of the application, and stack memory is used only by one thread of execution. Every object stored in the heap space, and stack memory have the reference to it.

2.

Can you explain the architecture of JVM?

Java Virtual Machine, that called JVM, is abstract machine. It’s a runtime environment in which java bytecode can be executed. In many hardware and software platforms you can use JVM.

3.

Why not just run native? why is the jvm needed?

we need JVM to allow java programs to run on any device or operating system., and manage and optimize program memory. We not just run native, because JVM allows you to write highly secure programs using built-in security features

4.

What do you understand about bytecode in Java?

Bytecode in java is the compiled format for java programs. With bytecode, we can transfer the java program across the network by JVM (java virtual machine).

5.

Can you tell me more about the memory areas available in JVM?

In JVM we have two kinds of memory, the heap memory and non heap memory. The heap memory is the most popular one. It's where objects that are created by the application are stored.

6.

What is just-in-time compilation?

Just in time compilation (JIT) is compiler that compiles the bytecodes of the method into native machine code, compiling it just in time to run. When a method has been compiled, the JVM calls the compiled code of that method directly instead of interpreting it.