In your own words what is the JVM?

Answer: JVM is an abstract machine that transforms bytecode to machine language and then executes it.

What about JIT? What is it?

Answer: Just in time compilation is a type of compilation that occurs in the run time of the program.

How can you execute GC?

Answer: Garbage collector is executed automatically.

What are the downsides of GC?

Answer: Since the garbage collector works automatically, you can't free memory the moment you want.
Also, garbage collectors can consume additional resources and impact performance.

In few words what can you say about the heap space?

Answer: It's the place where objects of the program are stored.

What about PermGen? How to increase?

Answer: Permanent Generation is the space where the information of the VM itself is stored. You can increase the size by modifying -XX:MaxPermSize.

How to increase Java heap?

Answer: You can increase the size by modifying -Xmx.

Explain Hotspot Heap structure

Answer: It has three main generations which are: young generation, old generation and permanent generation. The young generation consists of an eden space and two survivor spaces.

Give two scenarios where you can get an OutOfMemoryError error

Answer:

1) When the permanent generation space is not big enough to handle all the libraries imported in the program.

2) When the size of the objects combined exceeds the heap space size.

How can VM technology be beneficial for slow programs?

Answer: Due to JIT compilation, the code can be optimized in run time, making the execution of the code faster.