JAVA INTERVIEW QUESTION

1️⃣ **What is the difference between JDK and JRE?**

**JDK (Java Development Kit)** includes tools to write and compile Java code.  
**JRE (Java Runtime Environment)** only lets you run Java programs, not write or compile them.

2️⃣ **What is Java Virtual Machine (JVM)?**

JVM is the engine that runs Java bytecode. It makes Java programs platform-independent by converting bytecode into machine code.

3️⃣ **What are the different types of memory areas allocated by JVM?**

* **Heap**: Stores objects.
* **Stack**: Stores method calls and local variables.
* **Method Area**: Stores class-level data like method info.
* **Program Counter**: Tracks current instruction.
* **Native Method Stack**: For native (non-Java) methods.

4️⃣ **What is JIT compiler?**

JIT (Just-In-Time) compiler improves performance by converting bytecode into machine code during runtime.

5️⃣ **How Java platform is different from other platforms?**

Java is platform-independent. You don’t need to rewrite code for different operating systems—it runs on any system with JVM.

6️⃣ **Why people say that Java is ‘write once and run anywhere’ language?**

Because Java code is compiled into bytecode, which can run on any device that has a JVM—no need to modify the code.

7️⃣ **How does Class Loader work in Java?**

Class Loader loads .class files into memory when needed. It helps Java load classes dynamically during runtime.

8️⃣ **Do you think ‘main’ used for main method is a keyword in Java?**

No, main is not a keyword. It’s just the name of the method where Java starts executing the program.

9️⃣ **Can we write main method as public void static instead of public static void?**

Nope. The correct order is public static void. Changing the order gives a compilation error.