1 .What is the difference between JDK and JRE?

Ans. JDK is a java development kit which provides tools to developers to implement java including compiler, debugger, and other tools.

JRE provides libraries and JVM to run java programs but does not provide development tools.   
  
  
2. What is Java Virtual Machine (JVM)?

Ans. JVM is a part of JRE that executes the Java Byte code. It interpretes source code into byte code and compile into machine code for the host system.  
  
  
3. What are the different types of memory areas allocated by JVM?

Ans. Method area- stores the class level data like

Heap- stores the object and arrays.

Stack- stores the methods, local variables and results.

Program counter register - Tracks current instruction  
  
  
4. What is JIT compiler?

Ans. JIT(just-in-time) compiler improves the performance by compiling bytecode into native machine code at runtime, so frequently used codes runs faster.  
  
  
5. How Java platform is different from other platforms?

Ans. Java is **platform independent** because compiled Java code (bytecode) runs on any system with a JVM, unlike other languages that compile directly to platform-specific machine code  
  
6. Why people say that Java is ‘write once and run anywhere’ language?

Ans. Because java code is compiled into bytecode , which can run in any device with a jvm – no need to rewwrite or recompile for different plateform.   
  
  
7. How does ClassLoader work in Java?

Ans. It loaded the class at runtime. In other word jvm performs linking process at runtime.

Bootstrap classloader- loads the core java classes

Extension classloader- loads the classes with ext directories.

Application classloader- loads the classes from classpath  
  
  
8. Do you think ‘main’ used for main method is a keyword in Java?

Ans. No, main is **not a keyword.** It’s just the name of the method that serves as the entry point of a Java application.  
  
9. Can we write main method as public void static instead of public static void?

Ans. No , order matters. Java expects modifiers before the return type, write public void static will give a compilation error.