

Basics, JVM, JRE

- Java is Platform Independent language and OOP programming language
- Major advantage - portability
 - Write once, run anywhere (WORA)
- JDK -> JRE -> JVM
 - JVM - Java Virtual Machine (software)
 - Java Program -> Compiler -> ByteCode -> JVM -> Machine Code (executable)
 - Java program - platform independent
 - JVM - platform dependent
 - JVM has JIT compiler (Just in time)
 - JRE - Java runtime environment
 - JVM
 - Class libraries (ex - java.math, java.util)
 - JDK - JRE + Compiler + Debugger
 - JDK, JVM, JRE - platform dependent
 - Java Code, Byte code - platform independent
- Java Standard Edition (JSE) - core java
- Java Enterprise Edition - JSE + API's
- Java Mobile/ Micro Edition - Mobile API's
- JVM calls main () method
- Filename == Public Class name
- One Java file can have only one public class
 - because JVM calls main () method from public class, but if there are more public classes inside one file, how will JVM know, main () method inside which class. (thus class name should be similar to filename, and should be public)
- main () - starting point of the program
 - should be inside public class
 - so that JVM can call this method outside this package