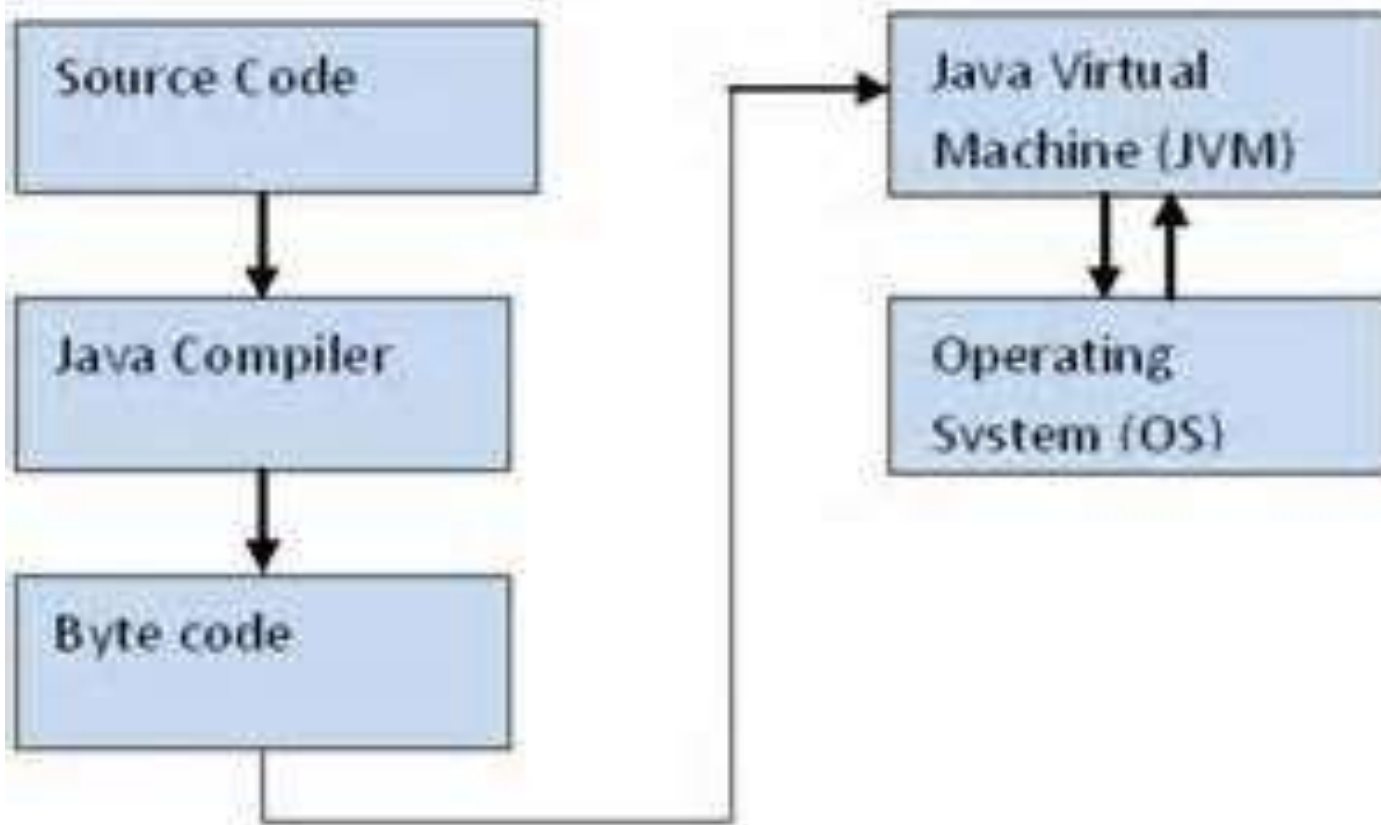


# Flow of Program

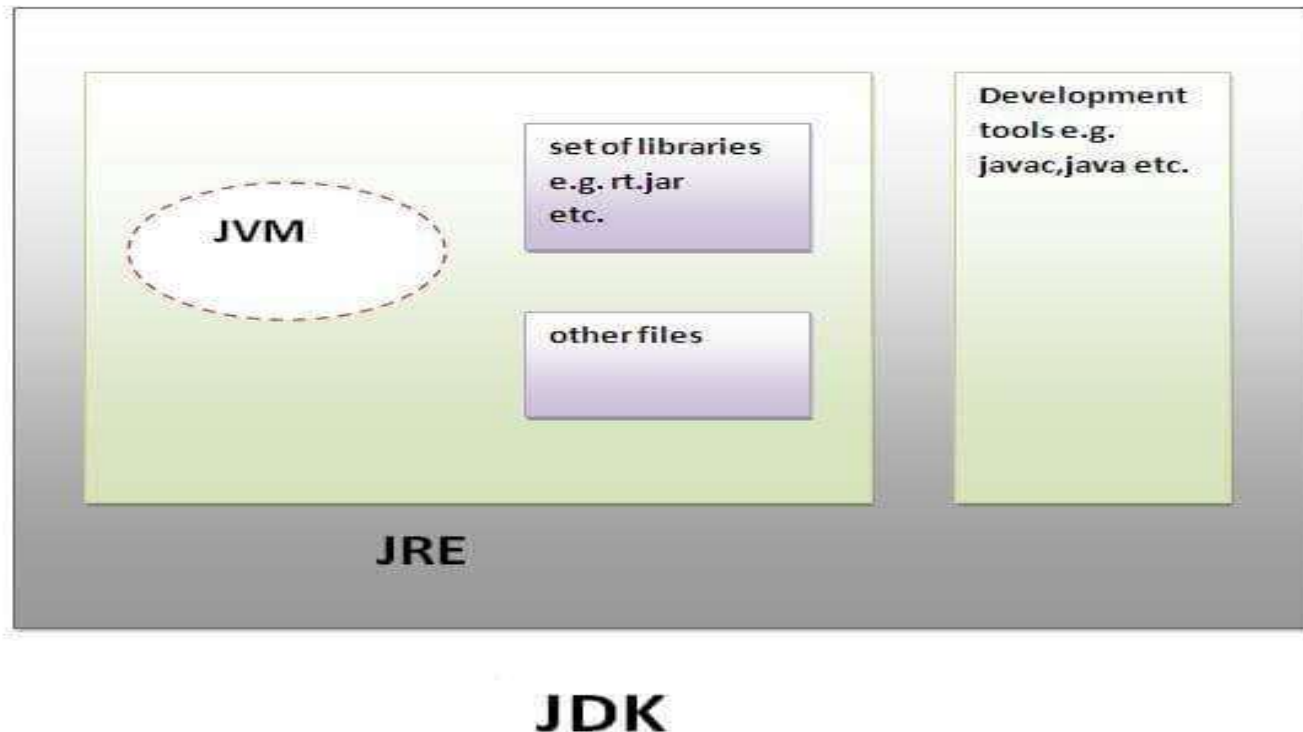


# What is JDK, JRE and JVM?

- ▶ Jdk provide development tool to Develop and Run the Java Program for Developers.
- ▶ JRE provide Environment to Run the Java Application for Clients.
- ▶ JVM is Responsible to Run the Java Program or Application Line by Line for Developers and Client both.
- ▶ **JDK = JRE + Development Tools**
- ▶ **JRE = JVM + Library Classes.**

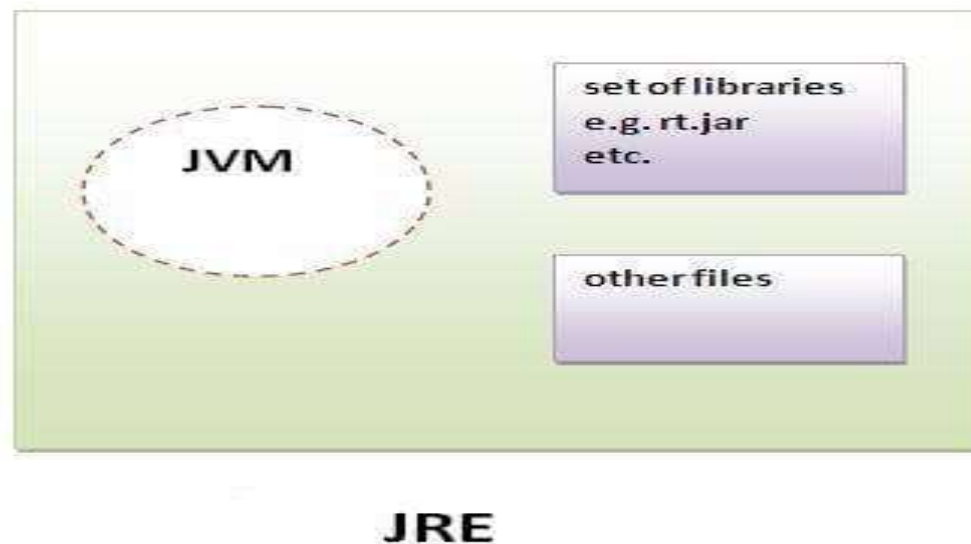
# Architecture of Jdk

- ▶ jdk contains the **Java Runtime Environment (JRE)**, an interpreter/loader (**java**), a compiler (javac), an archiver (jar), a documentation generator (javadoc) and other tools needed in **Java** development.



# Architecture of JRE

- ▶ JRE is an acronym for Java Runtime Environment.
- ▶ It is the implementation of JVM. It physically exists. It contains set of libraries + other files that JVM uses at runtime.



# JVM

- ▶ **JVM** (Java Virtual Machine) is an abstract machine that provides runtime environment in which java bytecode can be executed.
- ▶ JVM, JRE and JDK are platform dependent because configuration of each OS differs. But, Java is platform independent.
- ▶ The JVM performs following main tasks:
  1. Loads code
  2. Verifies code
  3. Executes code
  4. Provides runtime environment