**JVM (java virtual machine) Architecture**

**Execution phase**

**Sub class loader**

**Compiling** **Linking** **Initializing**

Boot class loader

Application class loader

Extension class loader

Byte code verify

Process

Resolve

Initialization

java source file (**.**java)

java compiler (**.**javac)

**.**class file

t1

t2

t3

**java stack area**

**Method area**

**Heap area**

t1 PC register

t2 PC register

tn PC register

**PC register**

Native method

Native method

Native method

**Native Stack**

Interpreter JIT compiler GC

Intermediate code

Code optimizer

Target code generator

Machine understandable language

Garbage collector

java native interface

(JNI)

Native language fetch

**Executing a java program**