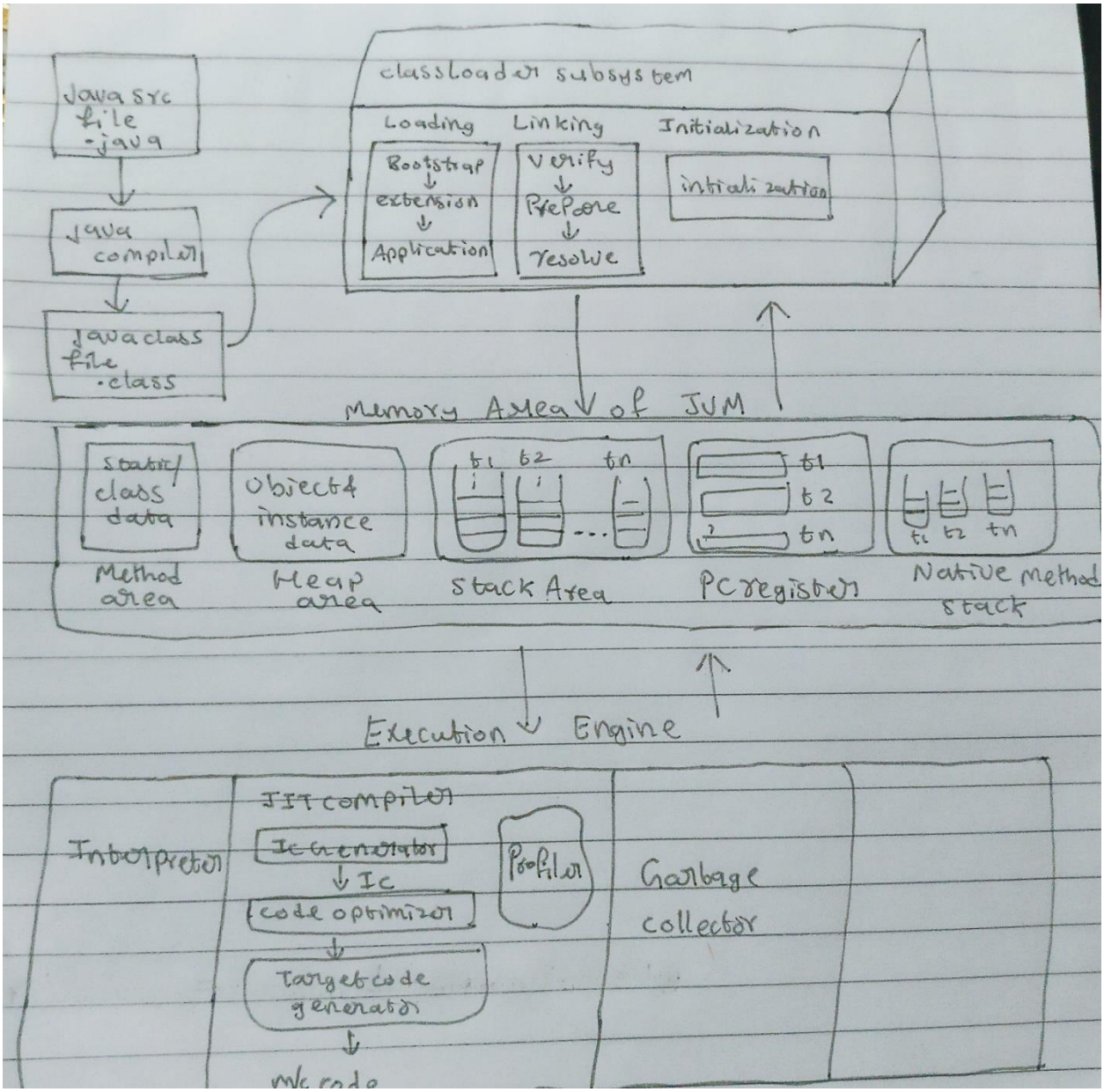
JVM Architecture:



Class Loader:

1. BootStrap class loader:
   Load class from bootstrap class path rte.jar core java api classes
2. Exenstion class loader:
   Load classes from ext folder lib.
3. Application class loader:
   Load classes from application level class path(environment path)
   Note:BootStrap gets highest priority
   Extension delegation Hierarchy

Verify: After loading byte code verifier verifies the code.
Prepare: memory is prepared for static variable
Resolve: all symbolic ref are replace with original

Intialization: static variable assignment and static block execution.

Memory area:

- Method area- class variable
- Heap area- Object and instance
- Stack area-(local variable) each stack frame contains
  Local variable array, operand stack, frame data(exception info). Data is thread safe
- PC- holds address next executing instruction

Execution Engine:

- JIt-Compiler: Just in time compiler interpret once for common
- Profiler: identifies hot spot(repeatedly required method)
- Garbage collection
- Java Native interface