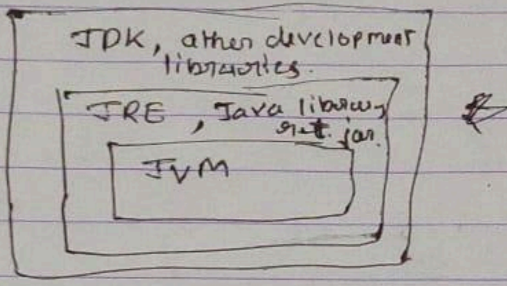
Assignment NO:3

1) components of JDK

↳ JDK also known as Java development kit it consists of Jvm, JRE, rt.jar and other supporting libraries and dependency for faster development.

2) JDK vs JVM vs JRE

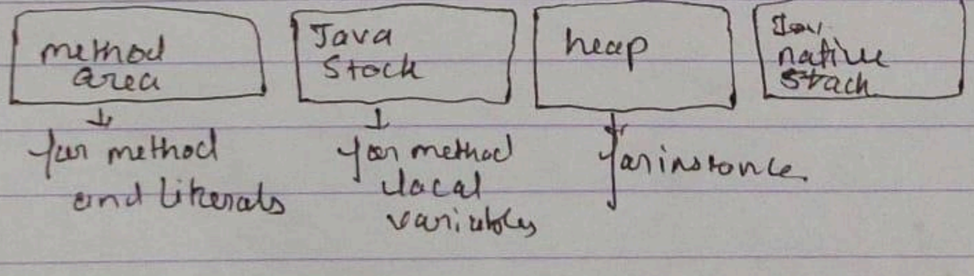


3). JVM, How dose it execute code.

Java virtual machine is a software platform that allows us to compile and run java code anywhere.

Jvm takes .java file compiles it to get a byte code then that byte code converted to native code gets loaded using class loader and is finally executed using Execution engine.

4). Jvm



5) JIT

↳ Just in time compiler is present with in execution engine part of JVM. it acts like a cache and compile and keeps the part of the code which is reused often. Byte code is asmbley like code of Java which can be supplied to any Jvm irrespective of OS and execute it which make Java independent.

6) JVM

Class loader →	run time data. →	execution engine
1) boot	method area	interpreter
2) extension	Java Stack	JIT compiler
3) System	heap	Garbage collector
4) custom	native stack	

7) .class file can be executed anywhere with help of Jvm which translates it to native code.

8) class loader loads all the dependencies of the program as well the class file we need to execute

9) Public → everywhere
Private → only same class
Protected. → only inherited classes
default → same package.

(10) p ↑

12) protected → is visible in sub-class even outside package.
default → in the same packog.

11) To override a method we cannot give more restricted access modifiers..
like public → private
protected → private
public → protected
} cannot be overridden

13) Only nested class can be declared private,
↳ inner

The top-level class can only be public, abstract, final.

14) The top-level class cannot be given access modifiers like protected or private it gives compiler error.

15) it gives an error, cannot find symbol.

(16) Case default can only be visible inside the some package.