## Assignment - 3

- Q.1) Explain components of JOK?
  - Java Development kit has tools needed for Java
    Programming Such as Gonfieler, JRE and Other like

    Java Doc and Javap.
  - Q.2) Diff blw Jok, Jum and JRE?
  - JRE and development tools. (Java Development kit)

Jym:- (Java virtual machine): - A part of JRE, it ours Java bytecode and provides a ountime environment.

JRE:-(Java Runtime Environment):- Includes JVM and libraries
necessary to our Java apps.

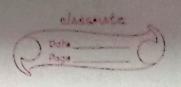
- Q.3) Role of Jvm in Java? How does Jvm execute Java code?
- Trm is responsible for executing Java byte code. It loads verifies and Interprets bytecode. Converting it into machine code for execution.
- (O.4) Explain memory management System of Jun:

  This divided into heap (for dynamic mem alloca),

  Stack, (Colls), Method Area (class strue), PC registers,

  Native Method Stacks. The Garbage Collector auto

  reclaims memory no longer in use.



- as) what are the IIT compieless and its role in Jum! what is bytecode and why is it imp for Java?
- Just-in Time Compieler Optimizes bytecode to Machine-ade
  at ountime

  Byte ade is Platform-independent ade generated after
  - Byte code is Platform-independent code generated after Compiling Java Source code.
- 0.6) Describe Architecture of Jum?
- Tt includes class Loader, Memory Area (Heap, Stack),

  Execution Ensine (JIT conficier, Interpreter), Native Method

  Interface, and Garbase Gliector. It ours Java in Secure

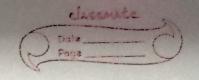
  and optimized environment.
- Q-7) How Java achieve Platform independence through Jvm?
- > By compiling Source Code into byte code, which is done by

  Jum, making Code runnable on diff 0.5.
- 0.8) what is Significance of class loaded in Java? what is process of garbage collection in Java?
- The class loader loads class into memory when they are ores at runtime. Garbage Collection is an automatic frecess in Java that reclaims by removing objects no longer referred by ones.
- 0.9) what are access modifiers in Java, How do they differ?
  - protected: within Same Package and by subclass

    Private: DN14 within Same class

Default: only within Same Packer.

	. 0
	ontocked & default
0.10)	Oiff blu Public, protected & default ?
	11) averywhere
-9	Public: Accessible everywhere  Protected: within Same Package & Same Sub-class  Protected: within Same Package
	default: within same package
i de la companya de l	default: Within 3
	11 lies access modifier
۵۰۱۱)	can you overside a method with diff access modifier
	in a sob-class?
<b>→</b>	Yes, but oversidden method cannot have more restrictive access.
h ex	restrictive access.
	· deservatives basic/decided
0.12)	Diff b/w Protected and default access?
4 1-)	pitt 9 to 18 years and 19 to add to the total of the control of th
· →	Protected allows access within Same Package and
Ed make	subclass in other package
	Default allows access within Same Package
Q · 13)	Is it possible to make a class private in Java?
->	No, toplerel classes cannot be declased protected of private. They can be public only.
	TO FOIVACE. THEY CAN DE FUEITE DATY.
Q.14	) can top-level class in Java be protected or private
	SI POIVARE
->	No, only it can be public only or no modifier
	Phase of the second of the sec
	THE RESERVE THE PROPERTY OF TH



- Q.13) what happens if a vasiable or method as Private in class of tory to access it from another class within same package?
- private member is not accessible from any other class even within same package.
- Q.16) Explain "Packago Private" or "default" access.
- nember is access modifier is specified, the default accessible level is package-private, meaning member is accessible only within class in Same packages.