1	Introduction to Java - Architecture and Installation									
100	- head with									
	How Java code executes?									
	Java tile compiler class tile interpreter Machine									
	(human (tritice file) (byte code) (time by line) (to the i)									
3	Readable) (certire bite)									
3	This is the									
	source code run directly on a									
system										
- ∂	The need JVM to									
	run this									
3	- This is the realon why Java is									
3	platform independent									
3										
-3	- In c f c++, the compilor converts source code									
-3	to Markine code directly whereas in Java there.									
-57	is an intermediate step in which source code is									
	converted to byte code (class file) which is a nort of									
-2	an another language by Java.									
ب	- when JVM converts byte code to Machine code, then									
	it will be understood by the system.									
	Platform independence:									
	- Byte code can non on all operating systems.									
	- We need to convert source code to machine code									
	so computer (an understand.									
	- compiler helps in doing this by turning it into an									
2	executable coder which is a set of instructions for the									
<u> </u>										
<u>~</u>	- After compiling elett code we get exe file which									
	·									
_	is platform dependent.									
	- In Java we get bytecode, which is converted									
>	to martine code by JUN.									

Java is platform independent but JVM is platform dependent. JDK vs TRE vs TVM vs JET JDK = TRE + Development Tools Java Development kit TRE = JVM + Library class Jova Rominae Environment [Java Vorbal HackinelJVM] [JUH-in-time] JDK: Provided on invironment to develop and run Java programs - Dev tools to provide an invironment to develop - TRE is a package that included - Dev tools to provide an invironment to develop - TRE is to except the program - a compiler - Java c - orthiver jar - does generation: javadoc - interpreter/loader			Page No.:	YOUVA	4
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5. JVM SEPTIME MENT OF BUSTON										
- After we get the class file, the things happening										
at run time are										
1. class toader loads all the classes needed to										
execute the program.										
2. Jun sends code to byte code verifier to check										
the format of code.										
101111111111111111111111111111111111111	of Gaze		-1	· ·						
compile time	Runtime									
		(How July works)	12.00.12	a = 1						
jova fêle		Loading	TAST GAR							
) but better	loader	- reads . class	file and	generates						
javac		binary data		11						
(compilation)	~	- an object o	the the	21 22						
	byte code	unan		317 -						
· class file	Venfier	- allocated Me	The class	hile.						
		variables an	d def-vit	VALUES						
JUM execulion:	-	replace Symt	olic refere	nu tom						
	Interpreter	the type to u	ofth direct	references						
Interpreter:	The Compression	- Fritialization:								
- Line by line execution		assigned with	Icriatles ar	e 8						
- when one method	V	defined in	the rode	and						
is called many trops	Puntime	Static block		. (
is called many times it will interpret again	1	JUM contain	Strik	and -						
	-	heap men	allocation	ζ.						
JIT!	Herdware									
- To those methods										
that are repeated	, JIT pour	dis direct Nac	hine ando	10						
that are repeated, JIT provides direct nachine code so that re-interpretation is not repeated, which makes										
the execution of code faster										
- acroage collector										
y										
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