## TAVA BASICS OVERVIEW

* What is JAVA?
- Platform Independent Language
- Supports 00PS
- Portability [WORA]
Write Once Run Anywhere
* 3 Main Components Of Java
JDK
JRE
(Jvm)
So JVM, JRE & JDK are 3 moin components of Java
, and the second se
> JVM : Java Virtual Machine
- It's just an abstract machine that doesn't exist physically.
g a general service of the service of
Java Compiler Bytecode JVM Machine Code
Program Smithe Sylven
СРИ
$\downarrow$
Ou+put

So JVM is platform dependent

So we need to install JVM based on the platform i.e Macos, Linux
or windows. Input for JVM is bytecode 9 output le machine code
Now since bytecode can be sun by any JVM, it makes a Java progos
Now since bytecode can be sun by any JVM, it makes a Java program platform independent.
JVM has JIT (Just In Time) compiler which takes byte code & convert it into machine code.
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it into machine code.
> JRE: Java Runtime Environment
* TRE contains JVM & class libraries i.e the libraries which we've
used in the code.
Class Librarics  JVM
Librancs
\ \ \ Jvm \ \ /
JRE
So it we have TRE we can sun any Java Program but we cannot
So if we have JRE, we can sun any Javo Program but we cannot code the program.
code the program.
> T D
=> JDK: Java Vevelopment Kit
- 9t has programs longuage information
- 9+ has compiler (javac)
- 9+ has debugger
00
So JDK = JR& + (Program Language + compiler +
So JDK = JRE+ (Program Longuage + compiler +  debugger + other der, components)
aebugger + other dev. components

So JVM, JRE I JDK all three are platform dependent but the
Compiled bytecode is platform independent.
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* JSE: Javo Standard Edition
JEE: Java Enterprise Edition   Jakarta (E)
JME: Java Micro Mobile Edition
JSE is the core Java
JEE = JSE + Berviers + JSP + Transaction API + Persistence API
JME = API for mobile applications