

How Javo Code executes-

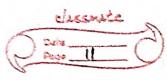
-	-	and the same of th		Commence of the second					
	java file	Compiler	· class file	interpreter	Machine				
	(Human readable)	(entire file)		(line by line)	code (0 } 1)				
1	this is the		e in the second state of t	1112000	9 9 9 9				
	- we need JVM to run this								
	- Reason why Java is platform independent								
-	The state of the s								
-	More about	Platform ?	ndependence -	317	1 12 14 1	The state of the s			
_	IL is means that byle code can run on all operating gyslems								
	We need to Convert source code to mathine code so Computer can under Compiler helps in doing this by turning it into executable code.								
	this executable code is a set of Instructions for the Computer.								
	After Compiling clatt code we get exe file Whis is platform dependent								
	In Java, we get the bytecode JYM Converts this to machine code.								
	Java is platform - Independent but JYM is platform dependent.								
	(by be code).			- Province					
-	and different designations in the last of								

JDK VS JRE VS JYM VS JIT

	DK=JRET Development Tods.	
C	and Development Kil)	1 1
	JRE = JVH + Library Closses Crava Runtime environment.	
	Java Virtual Machim	

Just in Time

	Date Onto Page 10
an en part e de	J.W. Payer and process of the second
	Provides environment to develop and sun the Java priogr
i inan i 📥	Il provides package that Encludes:
tar a Dira sala e Sala sala sala	1. development tools - to provide an environment to develop
	a TRE - to execute your program.
	s a compiler - java c
Marine agenda	H: archiver - Jan
-	5. docs generator-javadoc
وفالحديد سرحة	6. interpreter / loader.
	JRE-
	It is an installation package that provides environment to
· toping	run the program.
	It consists of
	1. Development technologies.
	2. User 9nterface toolkits.
15.7	2. User 9nterface toolkits.
15.7	[27] 이 아이 아이는 아이는 아이는 아이는 아이는 아이는 아이는 아이는 아이
15.7	2. User 9nterface toolkits. 3. Integration libraries.
The second second second	2. User 9nterface toolkits. 3. Integration libraries. 4. Base libraries. 5. Jym
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A CONTRACTOR OF THE PROPERTY O	2. User Integration libraries. 4. Bose libraries. 5. JVM After we get the class file, the next things happen at our 1. class loader loads all classes needed to execute the program
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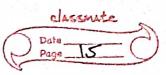
	Compile time	Runtime.	(Haw Irm worts) doss Loader		
-	· java file	doss loader	- Loading - Read's class file and generate bloady data		
1	javac [compilation]		- an object of this class is created		
	· class file	Byte code Verifier	in beap.		
		2 ved Her	- jum verifies the class file		
	Jym Execution	Interpreter	- allocate memory for all class variables of default values		
	- Interpreten.		- Replace Symbolic references from		
	- Une by line execution when one method is caused	Runtime	the type with direct references.		
-	many time it will interpret		- Initialization au static variables are assign		
	again and again.	Hardware	with their values defined in		
	-JIT	1 - 1 - 1	the code & Static block.		
	repeated JIT provides direct. JVM Contains the static and Heap memory mochine code so re-interpretation allocations.				
	- makes execution faster.		week and will prome to		
	- Grapade Collector.		The second secon		
	Grabage Celledo.	1/2			
		A MAN STATE	JRE .		
	Jana Schule				
		1			
	JDK Byte	code			
		AN 15 3-15	Continue 1994		
		-	+		
	en e	JVM			
	in a series of the series of t				
		-			

The state of the state of

First Program class Firstclass { public static void mala (String[] args) of System: aul printla ("Hella World")? 1. Inhat is Package? rackage is a Folder & System aut. printla ("Hello world") 12hot it is ? . System is class in lang package. out is a object of PrintStream class. printing is a method of Printstream class It is used to point in monitor. Inputs Po Java y using Scanner class is which is in util package import joua vtil scanner; class Input { public static void main (Stringer args) f Scanner input - new Scanner (System-in): System our printin (Input nextInt()): System out printle (Input next()). ITake only first word. System. aul: printin (input: nextlinec); 11 Take whole Une of string.

palo Types:	
primitive Dala Types is type that we can't break the dataty	_
Have the specific memory, (fixed memory).	r
class Primitives (
public static void main (string[] angs).	
Int rolling = 64:	
char letter. 18;	-
floal marks = 98.67f;	
double large Decimal Numbous = 4567654.4567;	-
long langeInleger = 34567834567876543L;	
boolean check = true;	
Section of the section of the second of the	-
I sugar forder except white look that.	
Comments In Java:	
J. Spole Line Comment> // Hello.	
J. Spole Line Comment> // Hello.	
J Single Line Comment → / Hello. 2] multi line Comment → / K	
3 Single Line Comment > // Hello.	
] Single Line Comment -> / Hello. 2] multi line Comment -> / K	
Josnyle Line Comment > / Hello. 2] multi line Comment > / K 1+ello 1+ello	
Josnyle Line Comment > // Hello. 2] multi Line Comment > // Hello. 1+ello Literal & Identifier:-	
Joseph Line Comment > / Hello Jamuli Line Comment > / K Hello Hello Literal 4 Tdentifier:- int a = 10;	
Joseph Line Comment > // Hello. 2) multi line Comment > // K/ Hello Hello Literal 4 Identifier:- int a = 10;	
Josngle Une Comment > // Hello. 2] multi line Comment > / K Itello Literal of Identifier: inl a = 10; John Hello. // Hello. /	
Josngle Line Comment > // Hello Jamulti Line Comment > // Hello Itello Literal 4 Identifier:- int a = 10; John of two Numbers One = a + b	
Josngle Line Comment > // Hello. Josngle Line Comment > // Hello. Hello K/ Literal & Identifier:- inl a = 10; John of two Numbers ans = a + b	
Josngle Line Comment > // Hello Josnati Line Comment > // Hello Itello Literal & Identifier:- inl a = 10; identifier: Sum of two Numbers ons = a + b 0 = 10	
Jongle Line Comment > // Hello Itello K /	
J. Single Line Comment > // Hello J. multi Line Comment > /x Itello Literal & Identifier:- inl a = 10; identifier. Sum of two Numbers ans = a + b a = 10 b = 20	

-	Type Conversion and Casting:
Entrh	100 - 1000 - 1000 ON TONE 2011 - 2000T DELLE
	Class Specasting
	public state void main (String [7] args)
	Scanner input - new Scanner (System in)
	float num = input- nextfloat()
. 1	System. aut. printla (num).
	7 For 25 - Stopp in the
	J + XX 12 - GZAS DZ 11 - condencial environt of the CZ-D:
	daung Africa can up a repatrioun 167.0.1
	· Two types should be compatible
	· Automatic Convent integer to float.
	· left hand side is greater than right.
	- DUST WY 2 JASTON 1
	Convent Integer 11-20 ifoatr- toom and along
	using Casting. Compressing bigger Number into the smaller
	int num - (int) (67.56);
	System. out.println(num); /1 67.
	- priditant staurti
	automatic type promotion in expressions.
	int 0- 257.
	byte b = (byte)(a); 11 257 1. 256 = 1 251 (126)
	System. out. printin (b). 111
	byte a = 40;
	byte b = 50;
	3
	byte c = 100; int d = $(9 * b)/c$; $(20 \%)/1 \%$
	System.ow. println (d); 1190.



lnt_	number = 'a';		372.01 Sel	
Syste	m.out. printin (number).	1 97 .	
		· lane	1. 54.2	
Rules for Type	Promotion -	10.00	TATE OF THE PARTY	
· All the byte ,	short and cha	и рнотове	to Integer.	
· Any one of t				to long.
Same for	float and	double.		
6x	. 3 ★ 5-6 →	float.	- 13-3-3-	A Comment of the Comm
		Francis E	Man race from	n = 241
byte b= 4	2:		HARROMAT AS	7-17
			site - Ains	
Short 5 =	1		the result for	
int i = r :	50000	510 m - 52 11	on ar ic	
	5.67 f			
double d=	6-1234	mi mini.	Street.	
double ores	ul = (fxb) +	(ilc) - (d	-5).	
system. or	ul-printin ((f +	b) + + (i(c) + ' +	(d-s));
54stem·o	w. println (res	sult)	10/2007	
			٩	
If - Condition	(statement)			1
			yr 3	
if (Conc	tition) f	Note: Cond	ition is true of	then goes into
if (Conc	4	the if st	atement body.	
J				
while-loop	a - Lea			
inl cow				
	count 1 - 5) 4			
	P(count):		018=> 1	
	unt tt;		2	
			3	
H Caracan Company	CONTRACTOR STATE OF THE STATE O	14 10 14 15 17		

for loop

for (ount = 1; count 1 = 5; count ++) Sop(count)

9. Temperature Conversion priegram Import java. util. Scanner;

class Temperature of

public static void man (String IT angs) {

Scanner Sc- new Scanner (Systemin); System. out. print ("Please enter temp in C:").

float temps - in sc. next Float O.

flow temp F = (temp (x 9/5) + 32. System.out.println(tempF).