



Concepts of Programming

Day 2: Sep 2022

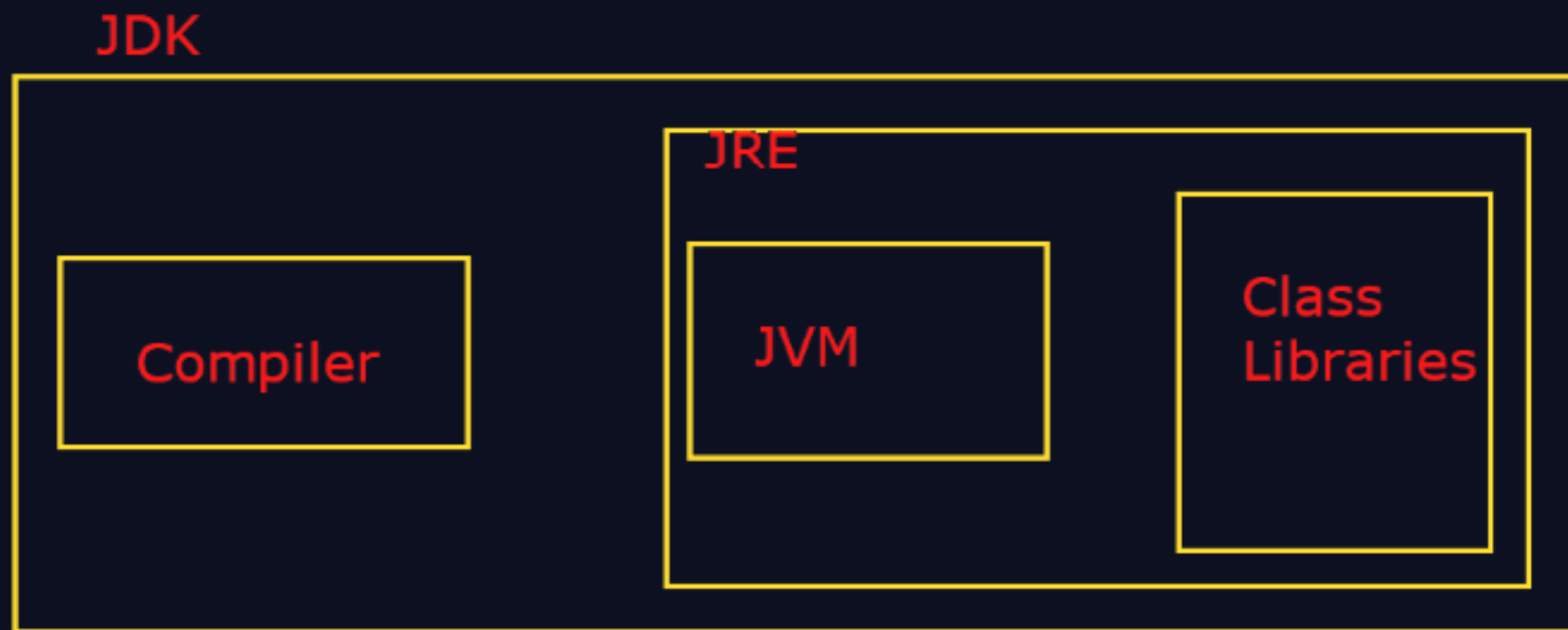
Introduction to Java

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CDAC Mumbai

Topic:

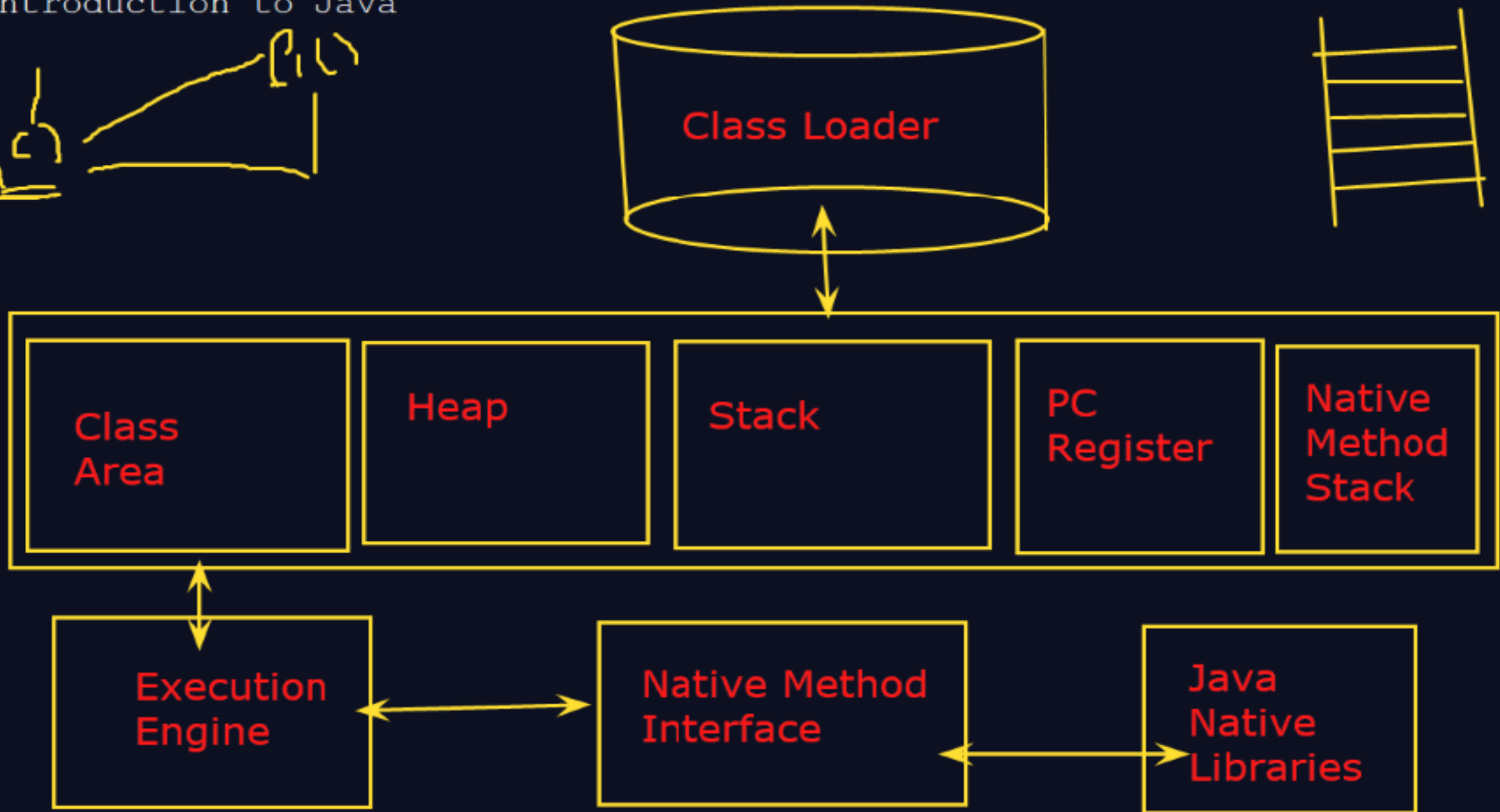
-Introduction to Java



int a, b

Topic:

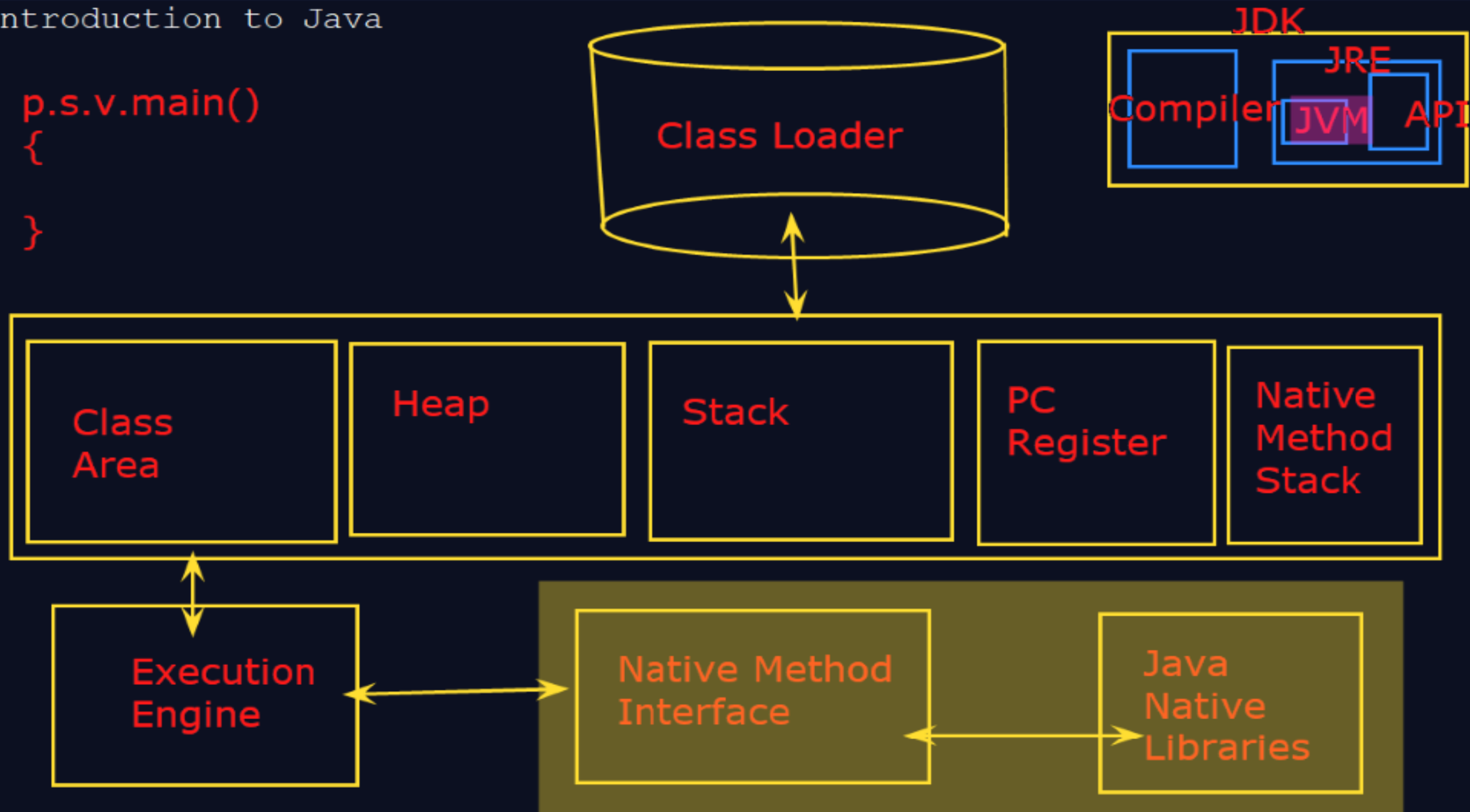
-Introduction to Java



Topic:

-Introduction to Java

```
p.s.v.main()  
{  
  
}
```



Topic:

-Introduction to Java

Java is a platform independent:

-

Source code

.java

Java Compiler

.class

Bytecode

Windows/Linux/MAC

p/f independence

Source
code.CPP

CPP Compiler Window

Windows
interpreter

CPP Compiler MAC

MAC
interpreter

CPP Compiler Linux

Linux
interpreter



Topic:
-Introduction to Java

Java is a platform independent:



JDK

Compiler + JRE

Source code

.java

Java Compiler

.class

Bytecode

Windows/Linux/MAC

p/f independent

Source
code.CPP

CPP Compiler Window

Windows
interpreter

CPP Compiler MAC

MAC
interpreter

CPP Compiler Linux

Linux
interpreter

p/f dependent

-4 pillars of OOPs

- Abstraction
- Encapsulation
- Inheritance
- Polymorphism

- Platform independent
- Secure language
- architectural neutral
- interpreted language
- Multithreaded language
- Distributed language
- Dynamic

Abstraction

data members

member function

Book

Title
Author
Bar code no
Cost
Pub

issue()
Return()
fine()

Encapsulation

-4 pillars of OOPs

- Abstraction
- Encapsulation
- Inheritance
- Polymorphism

- Platform independent
- Secure language
- architectural neutral
- interpreted language
- Multithreaded language
- Distributed language
- Dynamic

add(x,y)
12+13
123.456 + 123.678
Arun Chayhan
Image + Document
Doc1 +Doc2

Document

Image



Polymorphism

Book

Title
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issue()
Return()
fine()

Data Types

Non-primitive Data Types

class
array
String
interface

Primitive Data Types

Boolean Type

boolean

Size:[size is not applicable]

true/ false

character Type

char

0 to 65535
0
(blank space)

Integral Type

Integer Type

byte short int long

byte:-128 to 127
short:-32768 to 32767
int :-2³¹ to 2³¹-1
long:-2⁶³ to 2⁶³-1

Numeric Type

Floating Point Type

float double

0
f:-3.4e38 to 3.4e38
d:-1.7e308 to 1.7e308
0.0