

Introduction to Java - IComputer program

A computer program is a sequence of instructions written using a programming language to perform a specified task by the computer.

High level languages

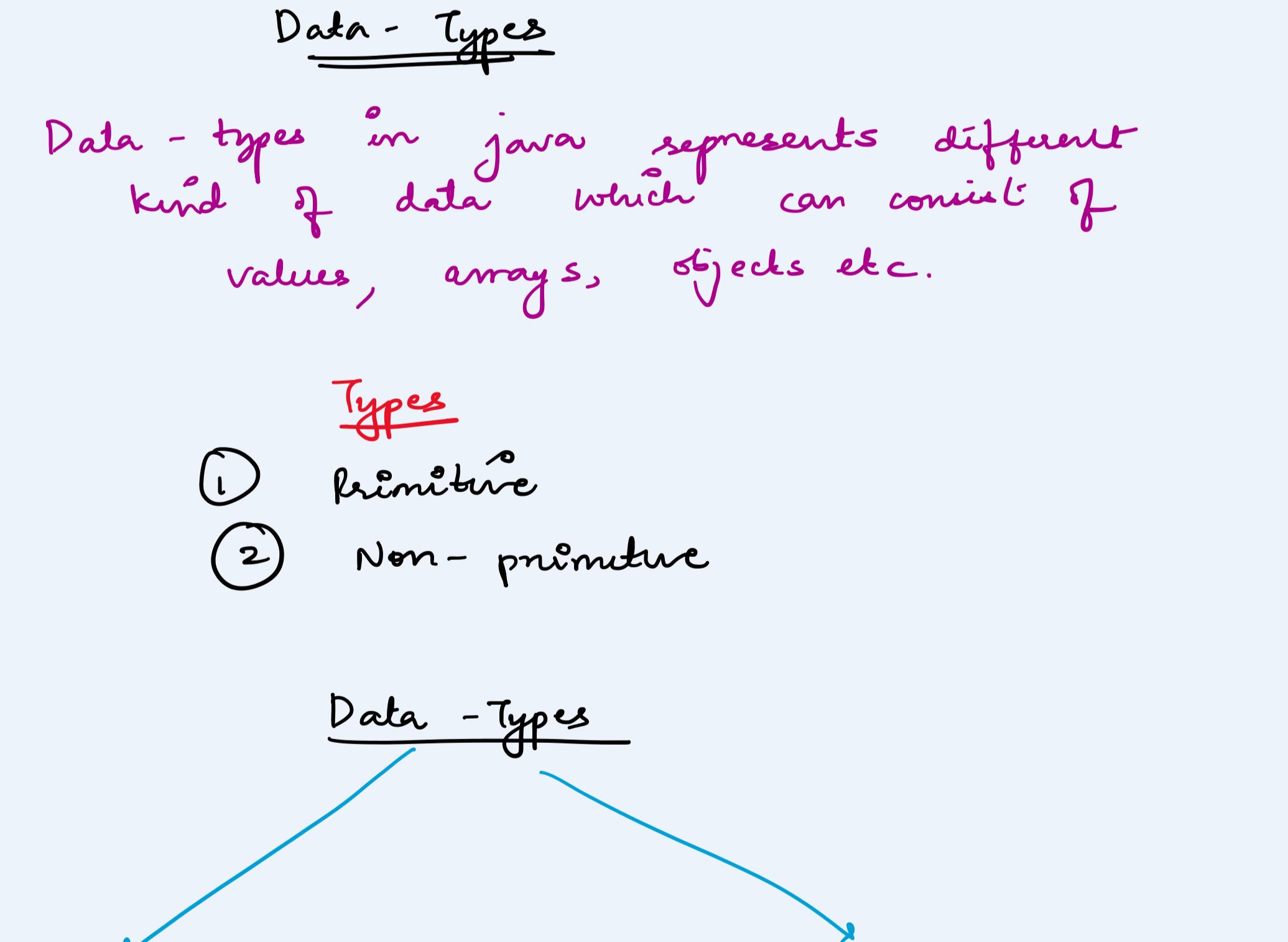
Eg: C++, Java, python, ruby, Javascript, ...

JavaFeatures of Java:-

- ① simple
 - ② object-oriented
 - ③ high performance
 - ④ multi-threaded
 - ⑤ platform-independent
 - ⑥ robust → strong
- a platform is a hardware or software environment in which we run a program.
- ① easy to learn
syntax is simple
 - ② operator overloading
 - ③ pointers
 - ④ simulate real world objects
 - ⑤ ability of a program or an OS process to share the use by one more than one user at a time.
 - ⑥ lack of pointers
 - ⑦ garbage collection
 - ⑧ exception handling

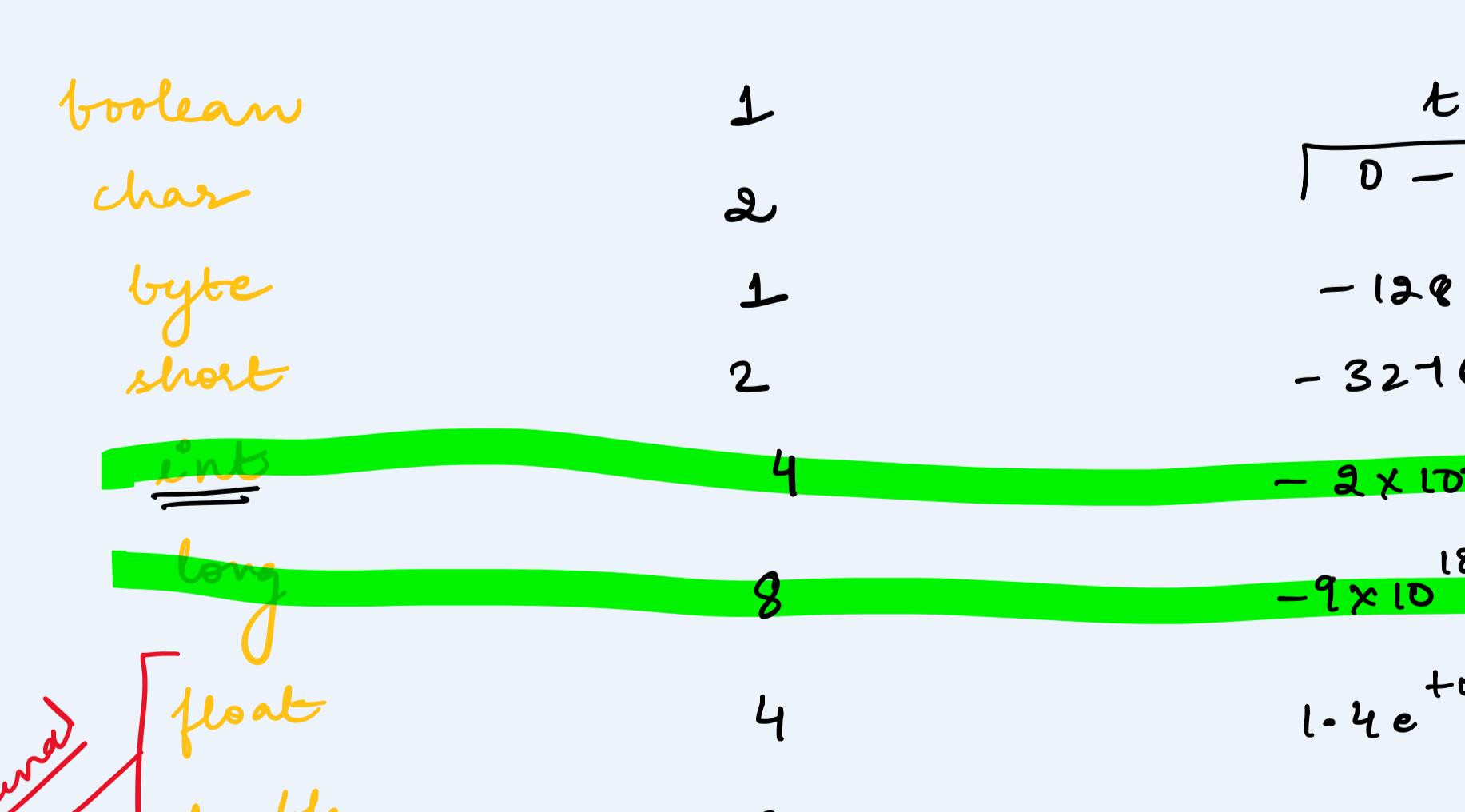
Variables in Java

Use case: store the name "Rohit" in the memory



→ Variables have data types which decides the type to be assigned to it.

(Ex) ~~x~~ (type) → 20 → char 'a'

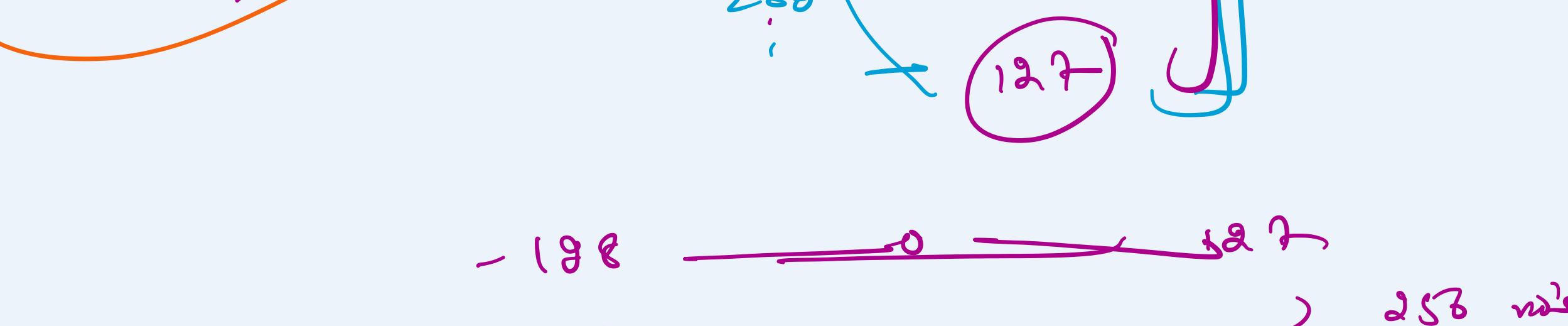
Variable InitialisationData Types

Data types in java represents different kind of data which can consist of values, arrays, objects etc.

Types

① Primitive

② Non-primitive

Data - TypesPrimitive Data TypesData - TypeByteRange

boolean
char
byte
short
~~int~~
float
double

1
2
1
2
4
4
8

value to be stored in variable

1 byte = 8 bits

t/b

10 - 65536 → unicode system

-128 to +127

-32768 to 32767

-2 x 10⁹ to 2 x 10⁹

-9 x 10¹⁸ to 9 x 10¹⁸

1.4 e +045 to 3.4 e +38

4.9 e -324 to 1.8 e +308

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