

## ⇒ Data Types :-

→ It defines the type of data

→ For example :-

10 - int

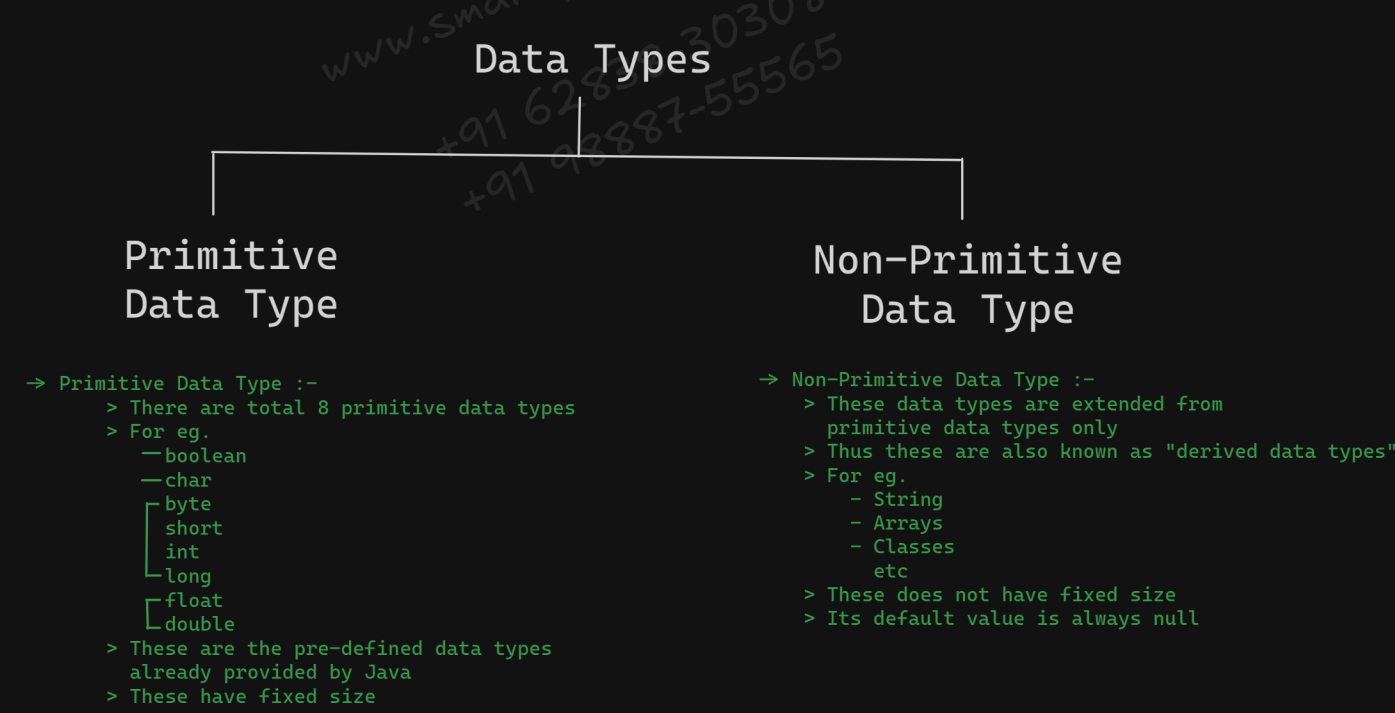
"deepak" - String

91.4 - float, double

true - boolean

→ Java is statically typed language that means we have to specify the type of data at compile time

→ Types of Data Types :-



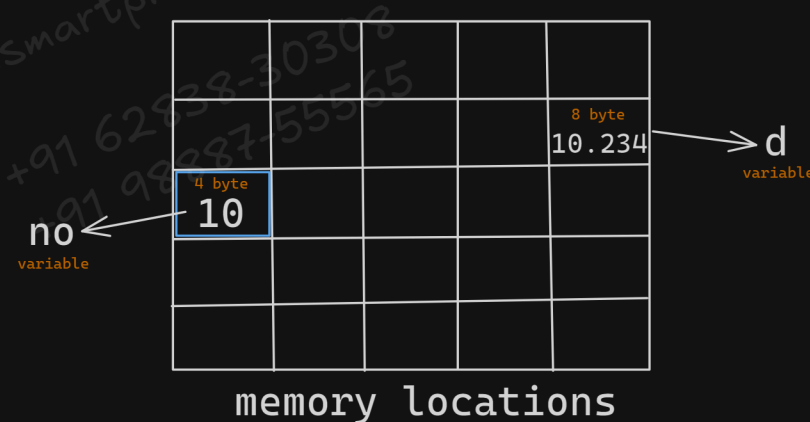
## ⇒ Variables :-

→ Variable is the name of memory location where data is stored

→ For eg.

int no = 10;

double d = 10.234;



→ Types of variables:-

1. Local Variable
2. Instance Variable
3. Static Variable

## ⇒ Literals :-

→ These are the data that we store in variables.

→ For eg

int no = 10; // 10 is literal

→ Types of literals:-

- > integer literal
- > floating-point literal
- > character literal
- > String literal
- > boolean literal
- > null literal

## ⇒ Operators :-

→ Operators are the special symbols which perform any operation of one or more operands

→ For eg

sum = no1 + no2; // = and + are operators ; no1 and no2 are operands

→ Types of operators :-

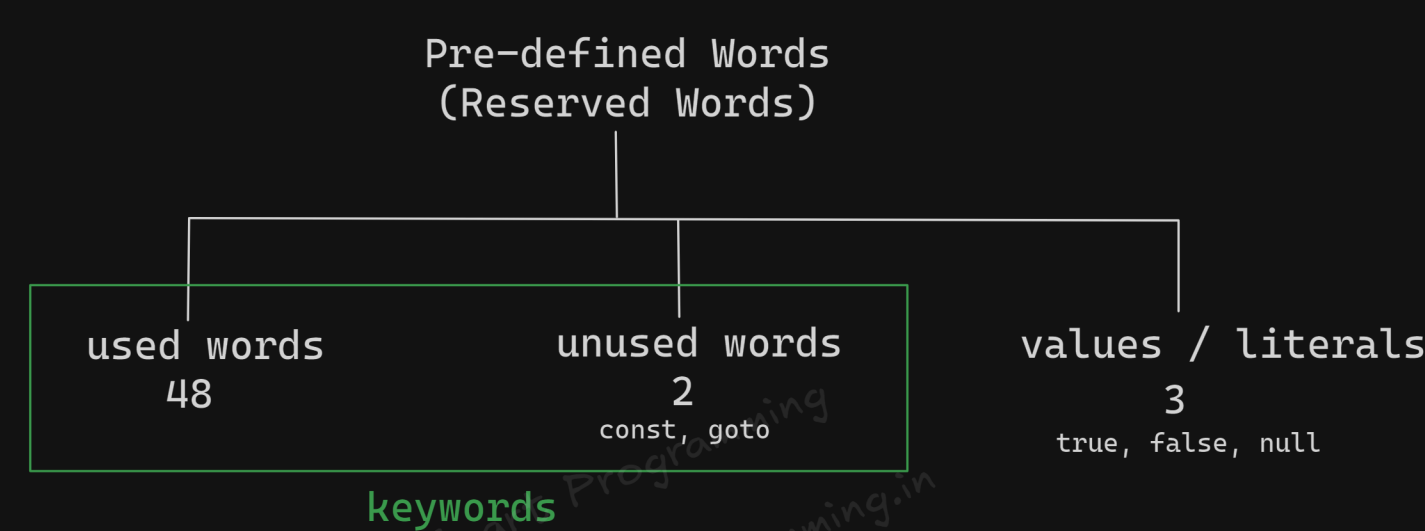
1. Arithmetic Operator
2. Assignment Operator
3. Relational Operator
4. Logical Operator
5. Ternary Operator
6. Unary Operators
7. Bitwise Operator
8. Shift Operator

## ⇒ Keywords :-

→ Keywords are the pre-defined words having any specific meaning

→ For eg. int, public, if etc

→ Total there are 50 keywords in Java



## ⇒ Identifiers :-

→ It is any name, it can be variable name, method name, class name, interface name etc

→ For eg.

```

int no=10;           // no is identifier
class Test { - }    // Test is identifier
void m1() { - }      // m1 is identifier
  
```

→ Rules of identifiers :-

1. Spaces cannot be used  
int roll no = 101; // wrong  
int rollno = 101; // correct
2. We can only use 2 symbols in identifier name ( \_ , \$ )  
int roll\_no = 101; // correct
3. Reserved Words cannot be used as an identifier name  
int public = 101; // wrong
4. We cannot use integer value at first position, but can use after first character  
int 1rollno = 101; // wrong  
int r1ollno = 101; // correct  
int rollno1 = 101; // correct

## ⇒ Naming Conventions :-

→ variable name : rollno OR roll\_no OR my\_roll\_no OR MAX\_NO

→ class name : Test OR MyTest OR MyTestDemo

→ method name : display() OR displayDetails() OR displayStudentDetails()

## ⇒ Interview Questions

1. If we create variable in static method, then its local or static variable ?
2. What are the different primitive data types in Java?
3. What is the default value of each primitive data type in Java?
4. What is the difference between primitive data types and reference data types?
5. Why is char in Java 2 bytes instead of 1 byte like in C/C++?
6. What happens if you assign a larger data type value to a smaller data type variable?
7. What are different types of variables in Java? (Local, Instance, Static)
8. What is the difference between static and non-static variables in Java?
9. What happens if you use a variable (local & instance) without initializing it in Java?
10. What is the difference between var and explicitly declared variables like int in Java?
11. What are the different types of operators in Java?
12. What is the difference between ++i and i++?
13. Difference between == and .equals
14. What is the difference between && (Logical AND) and & (bitwise AND)?
15. What is the purpose of the ternary operator in Java? Provide an example.
16. What is operator precedence in Java, and why is it important?
17. Are true, false and null keywords or not ?
18. Explain ternary operator using example