



# **SNS COLLEGE OF TECHNOLOGY**

**Coimbatore-35.**

**An Autonomous Institution**



**Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A++’ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

**DEPARTMENT OF COMPUTER SCIENCE ENGINEERING  
COURSE CODE & NAME : 23CST205 - Object Oriented Programming Using Java**

**II YEAR/ III SEMESTER**

**UNIT – II INTRODUCTION TO JAVA**

**Topic: BASICS OF JAVA PROGRAMMING-DATATYPES**

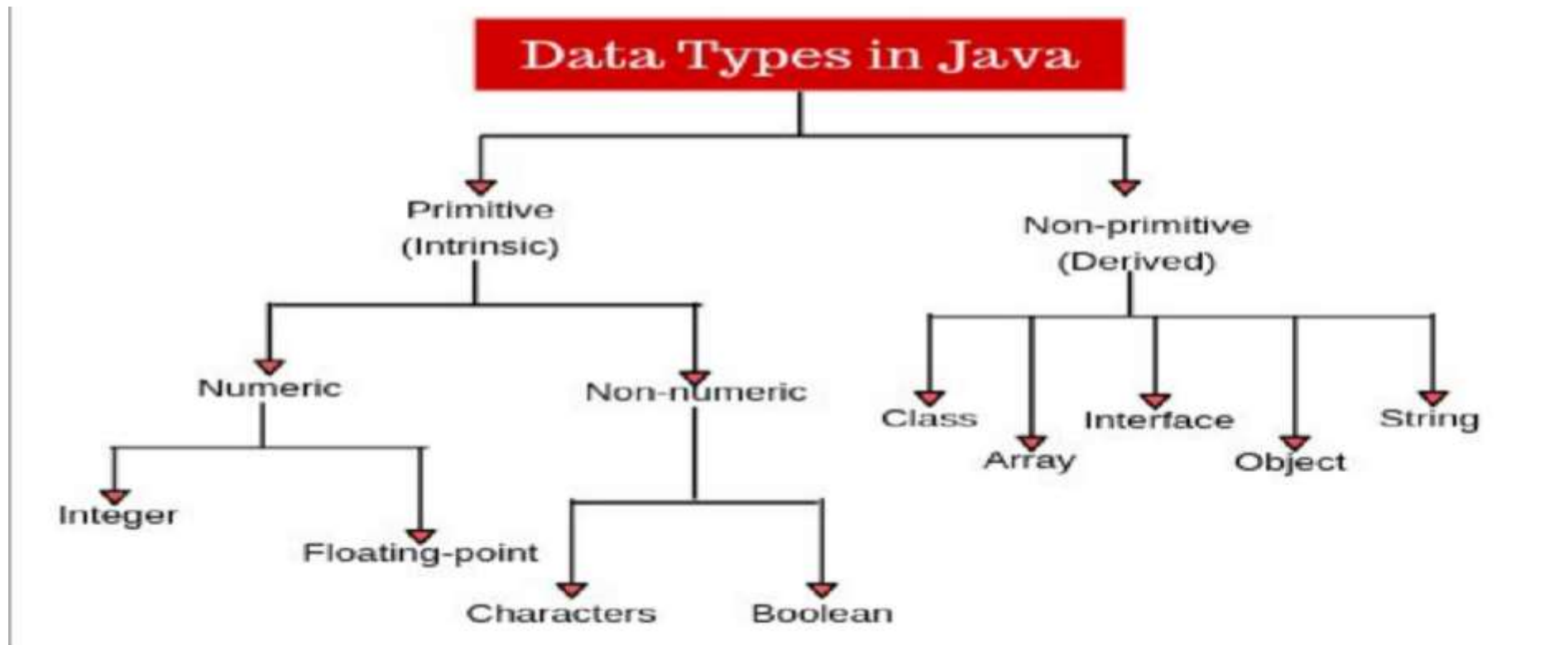
BASICS OF JAVA PROGRAMMING-DATATYPES/23CST205 - Object  
Oriented Programming Using Java/VANITHA.G/AP/CSE/SNSCT



# DATATYPE

## What are Data Types?

- Data types refer to the different sizes and values that can be stored in the variable.
- Two types of data type are in Java programming
  - (A) Primitive data types:** The primitive data types consist of int, float, boolean, byte, short, long, char and double
  - (B) Non-primitive data types:** The non-primitive data types include arrays, interfaces and class etc.





# Integer Data Types

**byte, short, int, long**

**Memory size:**

- **byte: 8 bits**
- **short: 16 bits**
- **int: 32 bits**
- **long: 64 bits**

**Examples:**

```
int num = 10;
```



# Floating-Point Data Types

- float, double
- Memory size:
  - - float: 32 bits
  - - double: 64 bits
- Examples:
  - float price = 19.99f;
  - double pi = 3.14159;



# Character and Boolean Data Type

## Character

Keyword : char

Memory size:

- - char: 16 bits (Unicode)

Examples:

- char letter = 'A';

## Boolean

Keyword : boolean

Memory size:

- - 1 bit (typically)

Examples:

- boolean isJavaFun = true;



# String and Array Data Type

## String Class

- Description:
  - Strings are sequences of characters.
- Examples:

```
String message = "Hello, World!";
```

## Array Types

- Description:
  - Arrays store multiple values of the same type.
- Examples:

```
int[] numbers = {1, 2, 3, 4};
```

