

# Data types and Comments

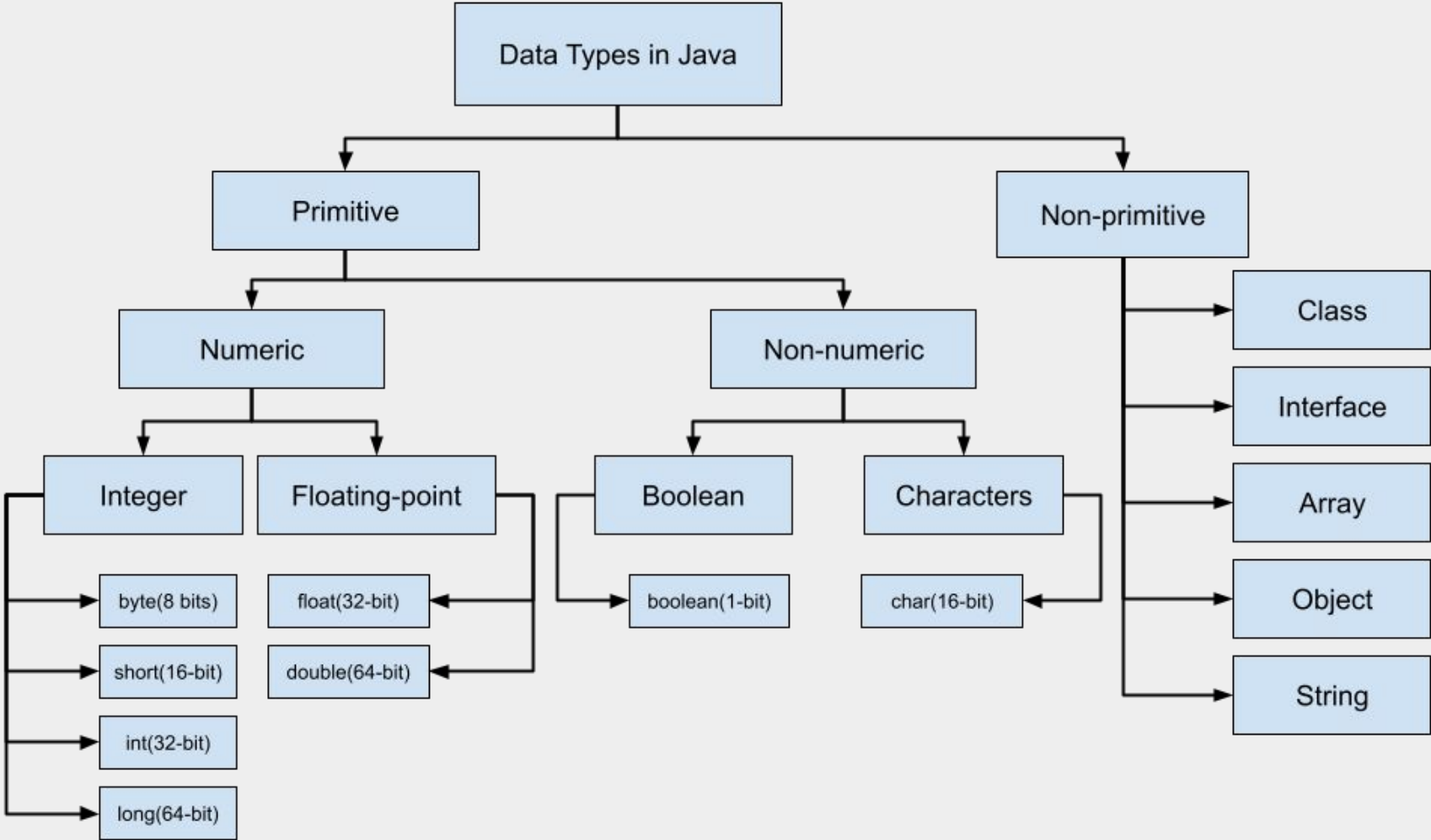
# Outline

1. Data types and Memory allocation
2. Types of variables and Scopes of Variables
3. Naming Conventions
4. Interview Questions

# Data Types and Memory Allocation

Java is a ***strongly typed language***. This means that every variable **must have a declared type**. There are eight primitive types in Java.

- Four integer types
  - byte, short, int, long
- Two floating-point number types
  - float (6-7 decimal digits)
  - double (15 decimal digits)
- one character type
- one a boolean type



# Rules of Identifiers

Identifiers in Java are names that identify elements such as classes, variables, and methods in a program. In other words, an identifier is one that is for naming variables, user-defined methods, classes, objects, parameters, labels, packages, and interfaces in a program.

- Java identifier is a sequence of characters that consists of letters, digits, underscores (`_`), and dollar signs (`$`).
- It must start with a letter, an underscore (`_`), or a dollar sign (`$`). It cannot begin with a digit.
- It cannot be a reserved word.
- It cannot be `true`, `false`, or `null`.
- It cannot contain `!@#$%^&*()_+ -= \ | / . , < > ? " ' ;` signs.
- It can be of any length.

[Oracle Documentation](#)

**Note:** Using `$` sign for variable naming is not recommended by oracle.

# Comment types

- Single line comment
- Multi line comment
- Java documentation comment

# Types of variables and Scopes of Variables

## Types of variables

- Local variables
- Instance variables
- Class/Static variables

## Scopes of Variables

- Method Level Scope
- Object Level Scope
- Class Level Scope

# Naming conventions

## Naming Conventions

- Packages
- Classes
- Interfaces
- Methods
- Variables
- Constants

## Programming Case Types

- camelCase
- PascalCase
- snake\_case
- kebab-case
- MACRO\_CASE
- Train-Case



# Interview Questions

**The only thing standing between you and outrageous success is continuous progress.**