



# Java Non-Primitive Data Types

[< Previous](#)[Next >](#)

## Non-Primitive Data Types

Non-primitive data types are called **reference types** because they refer to objects.

The main difference between **primitive** and **non-primitive** data types are:

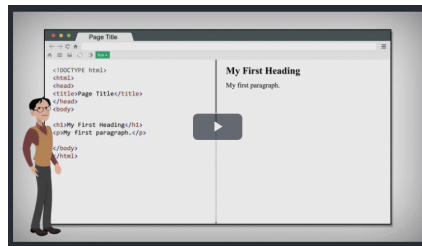
- Primitive types are predefined (already defined) in Java. Non-primitive types are created by the programmer and is not defined by Java (except for **String** ).
- Non-primitive types can be used to call methods to perform certain operations, while primitive types cannot.
- A primitive type has always a value, while non-primitive types can be **null** .
- A primitive type starts with a lowercase letter, while non-primitive types starts with an uppercase letter.
- The size of a primitive type depends on the data type, while non-primitive types have all the same size.

Examples of non-primitive types are Strings, Arrays, Classes, Interface, etc. You will learn more about these in a later chapter.

[< Previous](#)[Next >](#)

**NEW**

We just launched  
W3Schools videos



Explore now

**COLOR PICKER**

Get certified  
by completing  
a Java  
course today!



Get started

## CODE GAME



Play Game



Report Error

Spaces

Pro

Buy Certificate

## Top Tutorials

HTML Tutorial  
CSS Tutorial  
JavaScript Tutorial  
How To Tutorial  
SQL Tutorial  
Python Tutorial  
W3.CSS Tutorial  
Bootstrap Tutorial  
PHP Tutorial  
Java Tutorial  
C++ Tutorial  
jQuery Tutorial

## Top References

HTML Reference  
CSS Reference  
JavaScript Reference  
SQL Reference  
Python Reference  
W3.CSS Reference  
Bootstrap Reference  
PHP Reference  
HTML Colors  
Java Reference  
Angular Reference  
jQuery Reference

## Top Examples

HTML Examples  
CSS Examples  
JavaScript Examples  
How To Examples  
SQL Examples  
Python Examples  
W3.CSS Examples  
Bootstrap Examples  
PHP Examples  
Java Examples  
XML Examples  
jQuery Examples

## Get Certified

HTML Certificate  
CSS Certificate  
JavaScript Certificate  
Front End Certificate  
SQL Certificate  
Python Certificate  
PHP Certificate  
jQuery Certificate

[Java Certificate](#)[C++ Certificate](#)[C# Certificate](#)[XML Certificate](#)

---

[FORUM](#) | [ABOUT](#)

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 1999-2022 by Refsnes Data. All Rights Reserved.

W3Schools is Powered by W3.CSS.

