



# Java Wrapper Classes

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

## Java Wrapper Classes

Wrapper classes provide a way to use primitive data types ( `int` , `boolean` , etc..) as objects.

The table below shows the primitive type and the equivalent wrapper class:

Primitive Data Type	Wrapper Class
byte	Byte
short	Short
int	Integer
long	Long
float	Float
double	Double
boolean	Boolean
char	Character

Sometimes you must use wrapper classes, for example when working with Collection objects, such as `ArrayList`, where primitive types cannot be used (the list can only store objects):

## Example

```
ArrayList<int> myNumbers = new ArrayList<int>(); // Invalid
```

```
ArrayList<Integer> myNumbers = new ArrayList<Integer>(); // Valid
```

Try it Yourself »

---

## Creating Wrapper Objects

To create a wrapper object, use the wrapper class instead of the primitive type. To get the value, you can just print the object:

## Example

```
public class Main {  
    public static void main(String[] args) {  
        Integer myInt = 5;  
        Double myDouble = 5.99;  
        Character myChar = 'A';  
        System.out.println(myInt);  
        System.out.println(myDouble);  
        System.out.println(myChar);  
    }  
}
```

Try it Yourself »



Since you're now working with objects, you can use certain methods to get information about the specific object.

For example, the following methods are used to get the value associated with the corresponding wrapper object: `intValue()`, `byteValue()`, `shortValue()`, `longValue()`, `floatValue()`, `doubleValue()`, `charValue()`, `booleanValue()`.

This example will output the same result as the example above:

## Example

```
public class Main {  
    public static void main(String[] args) {  
        Integer myInt = 5;  
        Double myDouble = 5.99;  
        Character myChar = 'A';  
        System.out.println(myInt.intValue());  
        System.out.println(myDouble.doubleValue());  
        System.out.println(myChar.charValue());  
    }  
}
```

Try it Yourself »

Another useful method is the `toString()` method, which is used to convert wrapper objects to strings.

In the following example, we convert an `Integer` to a `String`, and use the `length()` method of the `String` class to output the length of the "string":

## Example

```
public class Main {  
    public static void main(String[] args) {  
        Integer myInt = 100;  
        String myString = myInt.toString();  
        System.out.println(myString.length());  
    }  
}
```

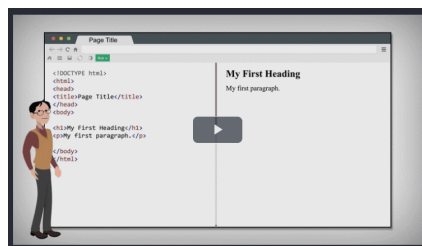
Try it Yourself »

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

ADVERTISEMENT

**NEW**

We just launched  
W3Schools videos



Explore now

COLOR PICKER



Get certified  
by completing  
a Java  
course today!



Get started

CODE GAME



Play Game

ADVERTISEMENT

ADVERTISEMENT

ADVERTISEMENT



---

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



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.

