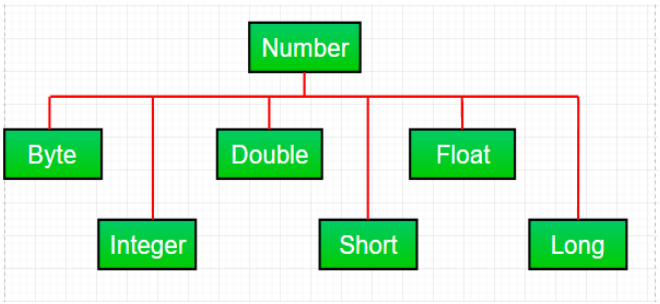
Most of the time, while working with numbers in java, we use primitive data types. But, Java also provides various numeric wrapper sub classes under the abstract class Number present in java.lang package. There are mainly six sub-classes under Number class.These sub-classes define some useful methods which are used frequently while dealing with numbers.



Class constructors

Sr.No.	Constructor & Description
1	Number() This is the Single Constructor.

Class methods

Sr.No.	Method & Description
1	byte byteValue() This method returns the value of the specified number as a byte.
2	abstract double doubleValue() This method returns the value of the specified number as a double.
3	abstract float floatValue() This method returns the value of the specified number as a float.
4	abstract int intValue()

	This method returns the value of the specified number as a int.
5	abstract long longValue() This method returns the value of the specified number as a long.
6	short shortValue() This method returns the value of the specified number as a short.

Character Class

Normally, when we work with characters, we use primitive data types char.

Example

```
char ch = 'a';

// Unicode for uppercase Greek omega character

char uniChar = '\u039A';

// an array of chars

char[] charArray ={ 'a', 'b', 'c', 'd', 'e' };
```

However in development, we come across situations where we need to use objects instead of primitive data types. In order to achieve this, Java provides wrapper class Character for primitive data type char.

The Character class offers a number of useful class (i.e., static) methods for manipulating characters. You can create a Character object with the Character constructor −

```
Character ch = new Character('a');
```

The Java compiler will also create a Character object for you under some circumstances. For example, if you pass a primitive char into a method that expects an object, the compiler automatically converts the char to a Character for you. This feature is called autoboxing or unboxing, if the conversion goes the other way.

Example

```
// Here following primitive char 'a'

// is boxed into the Character object ch

Character ch = 'a';

// Here primitive 'x' is boxed for method test,

// return is unboxed to char 'c'

char c = test('x');
```

Character Methods

Following is the list of the important instance methods that all the subclasses of the Character class implement −

Sr.No.	Method & Description
1	isLetter() Determines whether the specified char value is a letter.
2	isDigit() Determines whether the specified char value is a digit.
3	isWhitespace() Determines whether the specified char value is white space.
4	isUpperCase() Determines whether the specified char value is uppercase.
5	isLowerCase()

	Determines whether the specified char value is lowercase.
6	toUpperCase() Returns the uppercase form of the specified char value.
7	toLowerCase() Returns the lowercase form of the specified char value.
8	toString() Returns a String object representing the specified character value that is, a one-character string.

Escape Sequences

A character preceded by a backslash (\) is an escape sequence and has a special meaning to the compiler.

The newline character (\n) has been used frequently in this tutorial in System.out.println() statements to advance to the next line after the string is printed.

Following table shows the Java escape sequences −

Escape Sequence	Description
\t	Inserts a tab in the text at this point.
\b	Inserts a backspace in the text at this point.
\n	Inserts a newline in the text at this point.
\r	Inserts a carriage return in the text at this point.

\f	Inserts a form feed in the text at this point.
\'	Inserts a single quote character in the text at this point.
\"	Inserts a double quote character in the text at this point.
\\	Inserts a backslash character in the text at this point.

When an escape sequence is encountered in a print statement, the compiler interprets it accordingly.