

## Introduction

The **java.util.Scanner** class is a simple text scanner which can parse primitive types and strings using regular expressions. Following are the important points about Scanner:

- A Scanner breaks its input into tokens using a delimiter pattern, which by default matches whitespace.
- A scanning operation may block waiting for input.
- A Scanner is not safe for multithreaded use without external synchronization.

## Class declaration

Following is the declaration for **java.util.Scanner** class:

```
public final class Scanner
    extends Object
    implements Iterator<String>
```

## Class constructors

S.N.	Constructor & Description
1	<b>Scanner</b> <i>Filesource</i> This constructs a new Scanner that produces values scanned from the specified file.
2	<b>Scanner</b> <i>Filesource, StringcharsetName</i> This constructs a new Scanner that produces values scanned from the specified file.
3	<b>Scanner</b> <i>InputStreamsource</i> This constructs a new Scanner that produces values scanned from the specified input stream.
4	<b>Scanner</b> <i>InputStreamsource, StringcharsetName</i> This constructs a new Scanner that produces values scanned from the specified input stream.
5	<b>Scanner</b> <i>Readablesource</i> This constructs a new Scanner that produces values scanned from the specified source.
6	<b>Scanner</b> <i>ReadableByteChannelsource</i> This constructs a new Scanner that produces values scanned from the specified channel.

7

**Scanner***ReadableByteChannel*source, *String*charsetName

This constructs a new Scanner that produces values scanned from the specified channel.

8

**Scanner***String*source

This constructs a new Scanner that produces values scanned from the specified string.

## Class methods

S.N.	Method & Description
1	<a href="#"><u>void close</u></a> This method closes this scanner.
2	<a href="#"><u>Pattern delimiter</u></a> This method returns the Pattern this Scanner is currently using to match delimiters.
3	<a href="#"><u>String findInLinePatternpattern</u></a> This method attempts to find the next occurrence of the specified pattern ignoring delimiters.
4	<a href="#"><u>String findInLineStringpattern</u></a> This method attempts to find the next occurrence of a pattern constructed from the specified string, ignoring delimiters.
5	<a href="#"><u>String findWithinHorizonPatternpattern, inthorizon</u></a> This method attempts to find the next occurrence of the specified pattern.
6	<a href="#"><u>String findWithinHorizonStringpattern, inthorizon</u></a> This method attempts to find the next occurrence of a pattern constructed from the specified string, ignoring delimiters.
7	<a href="#"><u>boolean hasNext</u></a> This method returns true if this scanner has another token in its input.
8	<a href="#"><u>boolean hasNextPatternpattern</u></a> This method returns true if the next complete token matches the specified pattern.

1

[void close](#)

This method closes this scanner.

2

[Pattern delimiter](#)

This method returns the Pattern this Scanner is currently using to match delimiters.

3

[String findInLinePatternpattern](#)

This method attempts to find the next occurrence of the specified pattern ignoring delimiters.

4

[String findInLineStringpattern](#)

This method attempts to find the next occurrence of a pattern constructed from the specified string, ignoring delimiters.

5

[String findWithinHorizonPatternpattern, inthorizon](#)

This method attempts to find the next occurrence of the specified pattern.

6

[String findWithinHorizonStringpattern, inthorizon](#)

This method attempts to find the next occurrence of a pattern constructed from the specified string, ignoring delimiters.

7

[boolean hasNext](#)

This method returns true if this scanner has another token in its input.

8

[boolean hasNextPatternpattern](#)

This method returns true if the next complete token matches the specified pattern.

9

[boolean hasNextStringpattern](#)

This method returns true if the next token matches the pattern constructed from the specified string.

10

[boolean hasNextBigDecimal](#)

This method returns true if the next token in this scanner's input can be interpreted as a BigDecimal using the nextBigDecimal method.

11

[boolean hasNextBigInteger](#)

This method returns true if the next token in this scanner's input can be interpreted as a BigInteger in the default radix using the nextBigInteger method.

12

[boolean hasNextBigIntegerinradix](#)

This method returns true if the next token in this scanner's input can be interpreted as a BigInteger in the specified radix using the nextBigInteger method.

13

[boolean hasNextBoolean](#)

This method returns true if the next token in this scanner's input can be interpreted as a boolean value using a case insensitive pattern created from the string "true|false".

14

[boolean hasNextByte](#)

This method returns true if the next token in this scanner's input can be interpreted as a byte value in the default radix using the nextByte method.

15

[boolean hasNextByteinradix](#)

This method returns true if the next token in this scanner's input can be interpreted as a byte value in the specified radix using the nextByte method.

16

[boolean hasNextDouble](#)

This method returns true if the next token in this scanner's input can be interpreted as a double value using the nextDouble method.

17

[boolean hasNextFloat](#)

This method Returns true if the next token in this scanner's input can be interpreted as a float value using the nextFloat method.

18

[boolean hasNextInt](#)

This method returns true if the next token in this scanner's input can be interpreted as an int value in the default radix using the nextInt method.

19	<a href="#"><u>boolean hasNextIntinradix</u></a>  This method returns true if the next token in this scanner's input can be interpreted as an int value in the specified radix using the nextInt method.
20	<a href="#"><u>boolean hasNextLine</u></a>  This method returns true if there is another line in the input of this scanner.
21	<a href="#"><u>boolean hasNextLong</u></a>  This method returns true if the next token in this scanner's input can be interpreted as a long value in the default radix using the nextLong method.
22	<a href="#"><u>boolean hasNextLonginradix</u></a>  This method returns true if the next token in this scanner's input can be interpreted as a long value in the specified radix using the nextLong method.
23	<a href="#"><u>boolean hasNextShort</u></a>  This method returns true if the next token in this scanner's input can be interpreted as a short value in the default radix using the nextShort method.
24	<a href="#"><u>boolean hasNextShortinradix</u></a>  This method returns true if the next token in this scanner's input can be interpreted as a short value in the specified radix using the nextShort method.
25	<a href="#"><u>IOException ioException</u></a>  This method returns the IOException last thrown by this Scanner's underlying Readable.
26	<a href="#"><u>Locale locale</u></a>  This method returns this scanner's locale.
27	<a href="#"><u>MatchResult match</u></a>  This method returns the match result of the last scanning operation performed by this scanner.
28	<a href="#"><u>String next</u></a>  This method finds and returns the next complete token from this scanner.
29	<a href="#"><u>String nextPatternpattern</u></a>  This method returns the next token if it matches the specified pattern.

30

[String nextStringpattern](#)

This method returns the next token if it matches the pattern constructed from the specified string.

31

[BigDecimal nextBigDecimal](#)

This method scans the next token of the input as a BigDecimal.

32

[BigInteger nextBigInteger](#)

This method Scans the next token of the input as a BigInteger.

33

[BigInteger nextBigIntegerinradix](#)

This method scans the next token of the input as a BigInteger.

34

[boolean nextBoolean](#)

This method scans the next token of the input into a boolean value and returns that value.

35

[byte nextByte](#)

This method scans the next token of the input as a byte.

36

[byte nextByteinradix](#)

This method scans the next token of the input as a byte.

37

[double nextDouble](#)

This method scans the next token of the input as a double.

38

[float nextFloat](#)

This method scans the next token of the input as a float.

39

[int nextInt](#)

This method scans the next token of the input as an int.

40

[int nextIntinradix](#)

This method scans the next token of the input as an int.

41

[String nextLine](#)

This method advances this scanner past the current line and returns the input that was skipped.

42

[long nextLong](#)

This method scans the next token of the input as a long.

43

[long nextLonginradix](#)

This method scans the next token of the input as a long.

44

[short nextShort](#)

This method scans the next token of the input as a short.

45

[short nextShortinradix](#)

This method scans the next token of the input as a short.

46

[int radix](#)

This method returns this scanner's default radix.

47

[void remove](#)

The remove operation is not supported by this implementation of Iterator.

48

[Scanner reset](#)

This method resets this scanner.

49

[Scanner skipPatternpattern](#)

This method skips input that matches the specified pattern, ignoring delimiters.

50

[Scanner skipStringpattern](#)

This method skips input that matches a pattern constructed from the specified string.

51

[String toString](#)

This method returns the string representation of this Scanner.

52

[Scanner useDelimiterPatternpattern](#)

This method sets this scanner's delimiting pattern to the specified pattern.

53

#### [Scanner useDelimiterStringpattern](#)

This method sets this scanner's delimiting pattern to a pattern constructed from the specified String.

54

#### [Scanner useLocaleLocalelocale](#)

This method sets this scanner's locale to the specified locale.

55

#### [Scanner useRadixinradix](#)

This method Sets this scanner's default radix to the specified radix.

## Methods inherited

This class inherits methods from the following classes:

• [java.util.Object](#)

Loading [MathJax]/jax/output/HTML-CSS/jax.js