




# Java keywords

Keywords of the Java programming  
language (Java 8)



# Keywords of interest

In the Programming in Java book, we are concerned with the following keywords:

abstract	continue	for	package	this
assert	default	if	private	throw
boolean	double	implements	protected	throws
break	else	import	public	try
byte	enum	instanceof	return	void
case	extends	int	short	while
catch	final	interface	static	
char	finally	long	super	
class	float	new	switch	

# Keywords of interest - classes

The following keywords are relevant when declaring a class (or enum or interface):

*Context (before the actual class definition):*

import            package

*Access level:*

private            protected            public

*Other modifier:*

abstract            final            static

*Entity (what are we declaring):*

enum            interface            class

*Hierarchy:*

implements            extends

# Keywords of interest - fields (variables) of a class

The following keywords are relevant when declaring fields:

*Access level:*

private protected public

*Other modifier:*

final static

*Type:*

boolean byte char double float int long short

*Note that classes like String when used as types are not keywords, they are identifiers (names)!*

# Keywords of interest - method declarations

For declaring methods of a class:

*Access level:*

private          protected          public

*Other modifier:*

abstract          final          static

*Type:*

boolean          byte          char          float          double          int          long          short          void

*Exception signal:*

throws

# Keywords of interest - code which does something

The following keywords are used when writing code which doesn't do something, like the body of constructors and methods (and initializers):

## *Control flow:*

continue for if break else return switch case while finally

## *Errors and exceptions:*

assert throw try catch

## *(Local) Variable declarations:*

boolean byte char double float int long short  
final

## *Tests:*

instanceof

## *Dereferencing*

this super

## *Creation:*

new

# The rest (outside of the scope of this book/course)

*Thread synchronization:*

synchronized

*Serialization:*

transient

*Floating point calculations:*

strictfp

*Concurrency/atomicity:*

volatile

*Methods written in other languages (differ between Java installations):*

native

*Java 8 interface default method modifier:*

default

# Further reading

- <https://docs.oracle.com/javase/specs/jls/se8/html/jls-3.html#jls-3.9>
- <https://docs.oracle.com/javase/tutorial/essential/concurrency/atomic.html>
- <https://docs.oracle.com/javase/tutorial/essential/concurrency/syncrغب.html>
- <https://docs.oracle.com/javase/tutorial/java/landl/defaultmethods.html>

(For those who really want to know more!)