**The Methods of java.lang.Object**

java.lang.Object provides a number of methods that are common to all objects. toString() is the most common such method. Since the default toString() method only produces the name of the class, you should override it in all classes you define.

* public Object()
* public final Class getClass()
* public int hashCode()
* public boolean equals(Object obj)
* protected Object clone() throws CloneNotSupportedException
* public String toString()
* public final void notify()
* public final void notifyAll()
* public final void wait(long timeout) throws InterruptedException
* public final void wait(long timeout, int nanoseconds) throws InterruptedException
* public final void wait() throws InterruptedException
* protected void finalize() throws Throwable

# The java.lang package

Each package defines a number of classes, interfaces, exceptions, and errors. For example, in Java 1.1 the java.lang package contains these:

## Interfaces in java.lang

* Cloneable
* Runnable

## Classes in java.lang

* Boolean
* Byte
* Character
* Class
* ClassLoader
* Compiler
* Double
* Float
* Integer
* Long
* Math
* Number
* Object
* Process
* Runtime
* SecurityManager
* Short
* String
* StringBuffer
* System
* Thread
* ThreadGroup
* Throwable
* Void

## Exceptions in java.lang

* ArithmeticException
* ArrayIndexOutOfBoundsException
* ArrayStoreException
* ClassCastException
* ClassNotFoundException
* CloneNotSupportedException
* Exception
* IllegalAccessException
* IllegalArgumentException
* IllegalMonitorStateException
* IllegalStateException
* IllegalThreadStateException
* IndexOutOfBoundsException
* InstantiationException
* InterruptedException
* NegativeArraySizeException
* NoSuchFieldException
* NoSuchMethodException
* NullPointerException
* NumberFormatException
* RuntimeException
* SecurityException
* StringIndexOutOfBoundsException

## Errors in java.lang

* AbstractMethodError
* ClassCircularityError
* ClassFormatError
* Error
* ExceptionInInitializerError
* IllegalAccessError
* IncompatibleClassChangeError
* InstantiationError
* InternalError
* LinkageError
* NoClassDefFoundError
* NoSuchFieldError
* NoSuchMethodError
* OutOfMemoryError
* StackOverflowError
* ThreadDeath
* UnknownError
* UnsatisfiedLinkError
* VerifyError
* VirtualMachineError

# You don't need to import java.lang.\*

There is one exception to the import rule. All classes in the java.lang package are imported by default. Thus you do not need to import java.lang.\*; to use them without fully qualified names.

Consider the System.out.println() method we've been using since the first day of class.

System is really the java.lang.System class. This class has a public static field called out which is an instance of the java.io.PrintStream class. So when you write System.out.println(), you're really calling the println() method of the out field of the java.lang.System class.