

The *Object* class

- Every base class implicitly extends the Object class
- The Object class provides some useful functionality for all classes
- The Object class is special in that the Java compiler and execution environment know about this.

What do we inherit from Object?

protected [Object](#) *clone()* Creates and returns a copy of this object.

boolean [equals](#)([Object](#) *obj*) Indicates whether some other object is "equal to" this one.

protected void *finalize()* Called by the garbage collector on an object when garbage collection determines that there are no more references to the object.

[Class](#)<? extends [Object](#)> *getClass()* Returns the runtime class of an object.

int *hashCode()* Returns a hash code value for the object.

String *toString()* Returns a string representation of the object.

What do we inherit from Object?

void notify() Wakes up a single thread that is waiting on this object's monitor.

void notifyAll() Wakes up all threads that are waiting on this object's monitor.

void wait() Causes current thread to wait until another thread invokes the notify() method or the notifyAll() method for this object.

void wait(long timeout) Causes current thread to wait until either another thread invokes the notify() method or the notifyAll() method for this object, or a specified amount of time has elapsed.

void wait(long timeout, int nanos) Causes current thread to wait until another thread invokes the notify() method or the notifyAll() method for this object, or some other thread interrupts the current thread, or a certain amount of real time has elapsed.