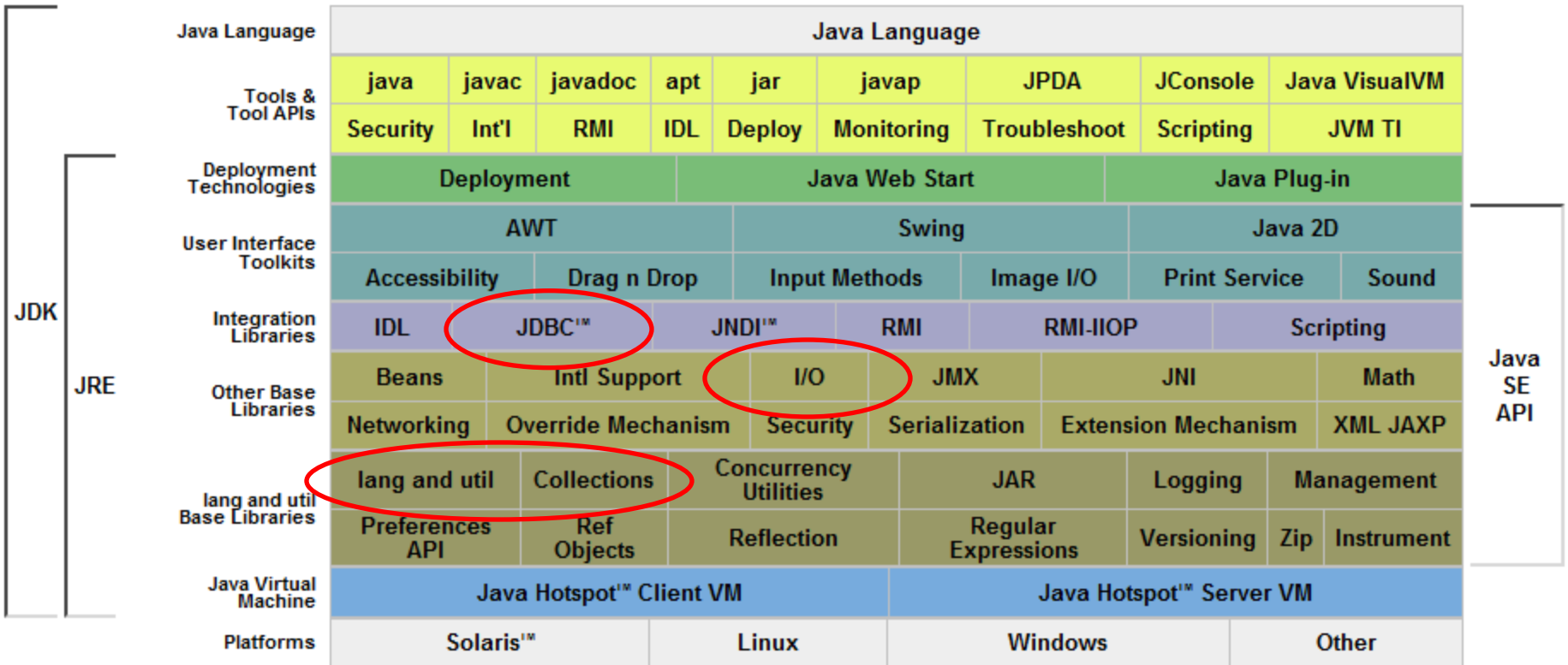


**MASTER EN MODELIZACIÓN
MATEMÁTICA, ESTADÍSTICA Y
COMPUTACIÓN
2014-2015**

Curso: Bases de datos y programación
orientada a objetos
Parte POO

**Librerías, estructura disponibilidad y uso.
Entrada / salida (I/O)**

Entorno de desarrollo de Java



Overview Package **Class** Use Tree Deprecated Index Help

Prev Class Next Class Frames No Frames

Summary: Nested | Field | Constr | Method Detail: Field | Constr | Method

java.lang

Class Object

java.lang.Object

```
public class Object
```

Class `Object` is the root of the class hierarchy. Every class has `Object` as a superclass. All objects, including arrays, implement the methods of this class.

Since:

JDK1.0

See Also:

[Class](#)

Constructor Summary

Constructors

Constructor and Description
<code>Object()</code>

Method Summary

Methods

Modifier and Type	Method and Description
protected <code>Object</code>	<code>clone()</code> Creates and returns a copy of this object.
boolean	<code>equals(Object obj)</code> Indicates whether some other object is "equal to" this one.
protected void	<code>finalize()</code> Called by the garbage collector on an object when garbage collection determines that there are no more references to the object.
<code>Class<></code>	<code>getClass()</code>

Clases básicas

[java.lang.Object](#)

- Clone
- Equals
- toString
- hashCode
- Finalize
- getClass

[java.lang.System](#)

- getenv
- getProperty, getProperties, setProperty, setProperties y clearProperty
- Exit
- Arraycopy
- setIn, setOut y setErr

java.lang.<objetos asociados a tipos>

java.lang.String (operador +, main); java.lang.StringBuffer

java.lang.Math; java.lang.StrictMath;

java.lang.Throwable

(otras) Thread, Process, SecurityManager,ClassLoader,Compiler, Runtime,etc

java.lang

•Java.util.Date; java.util.Calendar;

•Java.util.BitSet

•Java.util.Random

•Java.util.Timer; java.util.TimerTask

•Java.util.Properties

•Java.util.ResourceBundle

Java.util.Scanner; java.util.Formatter

FRAMEWORK COLECCIONES

- Interfaz List y clases Vector, Stack, ArrayList y LinkedList

- Interfaces Map y SortedMap, y clases Hashtable, HashMap, linkedHashMap y TreeMap

- Interfaces Set y SortedSet, y clases HashSet, LinkedHashSet y TreeSet

- El interfaz Queue y la clase PriorityQueue.

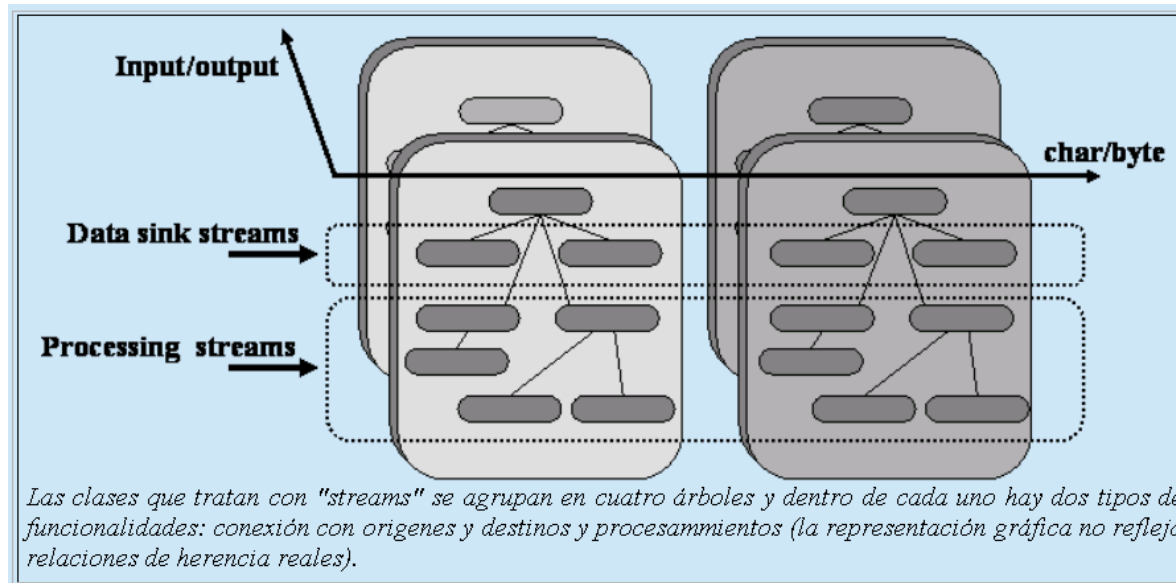
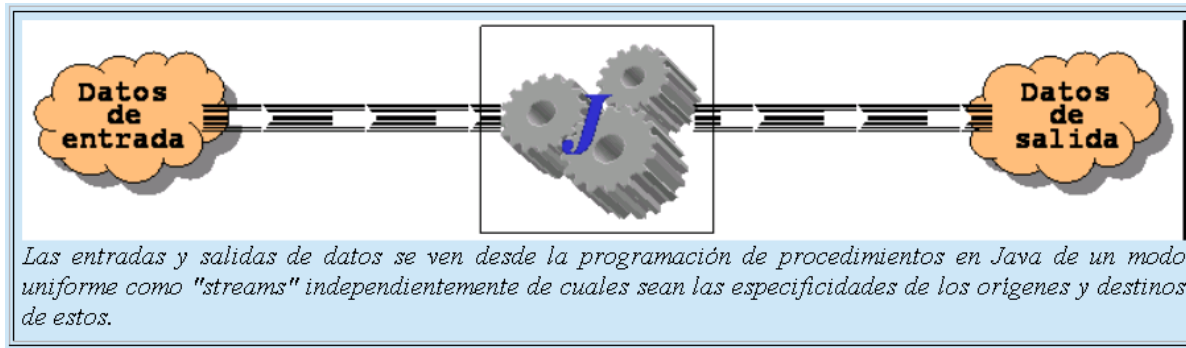
- El interfaz Comparator.

- Arrays (search sort)

EL SUBPAQUETE java.util.zip

java.util

Clases básicas: entrada/salida



**Reader
Writer**

**InputStream
OutputStream**

Origen/Destino	Streams de caracteres	Streams de Bytes
Memoria	CharArrayReader CharArrayWriter	ByteArrayInputStream ByteArrayOutputStream
	StringReader StringWriter	StringBufferInputStream
“Pipes”	PipedReader PipedWriter	PipedInputStream PipedOutputStream
Ficheros	FileReader FileWriter	FileInputStream FileOutputStream

Clases de entrada y salida de los orígenes y destinos básicos.

Procesamientos	Streams de caracteres	Streams de Bytes
Conversión de bytes a caracteres	InputStreamReader OutputStreamWriter	
Buffering	BufferedReader BufferedWriter	BufferedInputStream BufferedOutputStream
Filtrado	FilterReader FilterWriter	FilterInputStream FilterOutputStream
Concatenación		SequenceInputStream
Conversión de datos		DataInputStream DataOutputStream
Conteo	LineNumberReader	LineNumberInputStream
Peeking Ahead	PushbackReader	PushbackInputStream
Impresión	PrintWriter	PrintStream
Serialización de objetos		ObjectInputStream ObjectOutputStream

Clases para entradas y salidas con procesamiento de datos.

```
1- InputStreamReader entrada=new InputStreamReader(System.in);
2- BufferedReader entradaB=new BufferedReader(entrada);
3- //....
4- String s=entradaB.readLine();
```

```
1- BufferedReader entradaB=new BufferedReader(new InputStreamReader(System.in));
2- //....
3- String s=entradaB.readLine();
```

Un comentario sobre

- java.io.File
- java.io.RandomAccessFile