

Objective

Introduction

File Hello.java

```
1: public class Hello
2: {
3:     public static void main(String[] args)
4:     {
5:         // Display a greeting in the console window
6:
7:         System.out.println("Hello, World!");
8:     }
9: }
```

Output

```
Hello, World!
```

Our First Program

File Hello.java

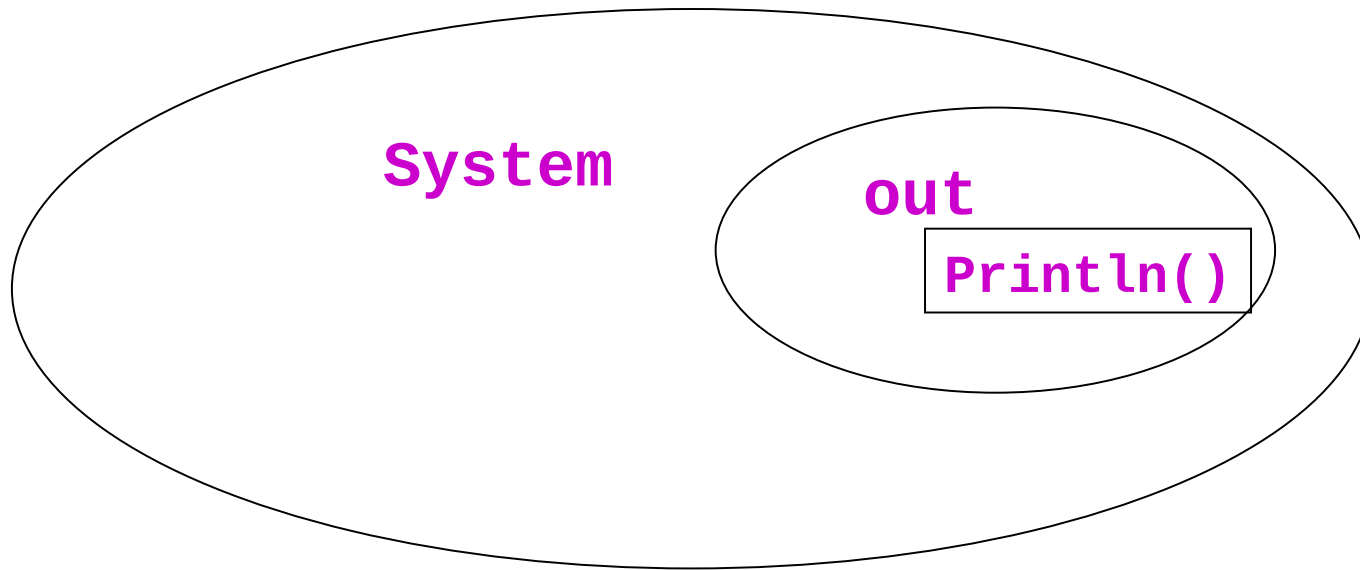
```
public class Hello
{
    public static void main (String[] args)
    {
        // display a greeting in the console window
        System.out.println("Hello, world!");
    }
}
```

Command Line Arguments



1. Every file can contain at most one **public** class, and the name of the public class must match the name of the file containing the class.
2. Java is case sensitive
3. Objects and Classes are the fundamental blocks of Java.

System



Syntax:

object.methodname (parameters)

Example:

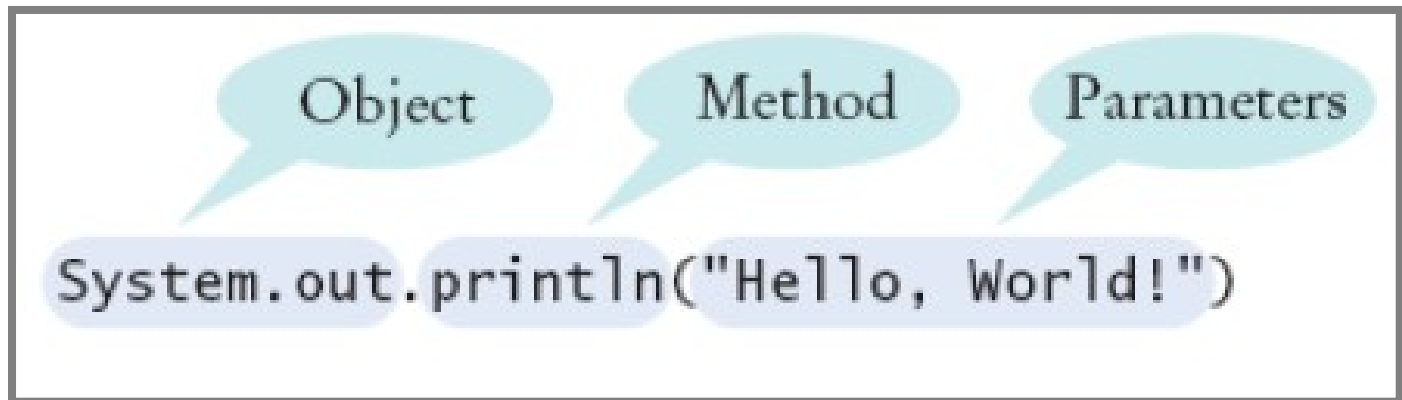
```
System.out.println("hello world");
```

Purpose:

Invoke a method on an object and supply parameters.

A Simple Program

- `public class ClassName`
- `public static void main(String[] args)`
- `// comment`
- Method call



Method Call

object.methodName(parameters)

Example:

```
System.out.println("Hello, Dave!");
```

Purpose:

To invoke a method of an object and supply any additional parameters

Converting high level-language code

Compiler - All instructions converted at once from high-level language to machine language; new program is then run.

Interpreter - High-level language code is read and converted at run time line by line

Java Applications

Console applications- support character output to a computer screen in a command window

Windowed applications- create a graphical user interface (GUI)

Tools to build Java programs

Compiler

Sun Microsystems JDK (Java Development Kit)

Other Options

IDE – editor, visual development, compiler, debugger such as Eclipse, IntelliJ, Borland Jbuilder, IBM's Visual Age for Java. Complex but very powerful.

Comments

```
/* Filename: Hello.java  
   Written by <your name> and <studentId>  
   Written on <today's date>  
*/
```



```
/** This program demonstrates the use of the  
    println() method to print the message Hello,  
    World! */
```



```
public class Hello  
{  
    // Add comments where it is necessary.  
    ...  
}
```