compact1, compact2, compact3

java.io

**Class Console**

* [java.lang.Object](https://docs.oracle.com/javase/8/docs/api/java/lang/Object.html)
  + java.io.Console
* **All Implemented Interfaces:**

[Flushable](https://docs.oracle.com/javase/8/docs/api/java/io/Flushable.html)

Console用于跟控制台设备交互，也就是说在windows下只能通过命令框cmd运行java才能使用。Eclipse中的控制台不能使用。

先上个例子：

|  |
| --- |
| import java.io.Console;  public class ConsoleTest {  public static void main(String[] args){  Console c = System.console();  String username = c.readLine("User name:");  c.printf("user:" + username + "\n");  char[] passwd = c.readPassword("Password:");  c.printf(String.valueOf(passwd));  }  } |

使用命令行对此类进行编译和运行，可以看到效果



可以发现，Password：这部分，当我们输入admin时，命令行上看不到任何我们输入的东西，只有回车后，将输入的password打印出来，才能看到真正输入的内容

|  |  |
| --- | --- |
| void | [**flush**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#flush--)()  强制将console中的内容直接输出出来 |
| [**Console**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html) | [**format**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#format-java.lang.String-java.lang.Object...-)([**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) fmt, [**Object**](https://docs.oracle.com/javase/8/docs/api/java/lang/Object.html)... args)  将console的output流中的内容格式化 |

|  |
| --- |
| 实例 |
| import java.io.Console;  public class ConsoleTest {  **public** **static** **void** main(String[] args) {  Console c = System.*console*();  c.format("hello %s", "world"); //格式化字符串，%s用world代替  c.flush();//hello world（将格式化的字符串强制输出到控制台：）  }  } |

|  |  |
| --- | --- |
| [**Console**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html) | [**printf**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#printf-java.lang.String-java.lang.Object...-)([**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) format, [**Object**](https://docs.oracle.com/javase/8/docs/api/java/lang/Object.html)... args)  将格式化的字符串写入到console的输出流中 |

|  |
| --- |
| 实例: 命令行显示hello world |
| import java.io.Console;  public class ConsoleTest {  **public** **static** **void** main(String[] args) {  Console c = System.*console*();  c.printf("hello %s", "world"); // hello world (控制台显示)  }  } |

|  |  |
| --- | --- |
| [**Reader**](https://docs.oracle.com/javase/8/docs/api/java/io/Reader.html) | [**reader**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#reader--)()  获取当前console相关的唯一reader对象 |

|  |
| --- |
| 实例: |
| import java.io.Console;  public class ConsoleTest {  **public** **static** **void** main(String[] args) {  Console c = System.*console*();  Scanner sc = **new** Scanner(c.reader()); //等待用户在命令窗口输入内容  String readString = sc.findInLine("aa");//如果输入的内容包含aa，获取内容。否则返回null  c.printf(String.*valueOf*(readString)); //输出命令窗口输入的内容  }  } |

|  |  |
| --- | --- |
| [**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) | [**readLine**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#readLine--)()  从console中读取用户输入的一行内容 |
| [**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) | [**readLine**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#readLine-java.lang.String-java.lang.Object...-)([**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) fmt, [**Object**](https://docs.oracle.com/javase/8/docs/api/java/lang/Object.html)... args)  提供一个提示，并接收用户从console中输入的一行内容 |

|  |
| --- |
| 实例: |
| import java.io.Console;  public class ConsoleTest {  **public** **static** **void** main(String[] args) {  Console c = System.*console*();  String noprompt = c.readLine(); //命令框会等待用户输入内容，然后将内容赋值给变量  c.printf(noprompt + "\n");//打印输入的内容。输入hello，这里就会打印hello  //命令框会出现一条带有input your name的提示，并等待用户输入内容  String prompt = c.readLine("input you %s:","name");  c.printf(prompt + "\n");}  } |

|  |  |
| --- | --- |
| char[] | [**readPassword**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#readPassword--)()  等同于readLine()，只不过用户在console中输入的内容不可见 |
| char[] | [**readPassword**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#readPassword-java.lang.String-java.lang.Object...-)([**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) fmt, [**Object**](https://docs.oracle.com/javase/8/docs/api/java/lang/Object.html)... args)  等同于readLine([**String**](https://docs.oracle.com/javase/8/docs/api/java/lang/String.html) fmt, [**Object**](https://docs.oracle.com/javase/8/docs/api/java/lang/Object.html)... args)，只不过用户在console中输入的内容不可见 |

这两个命令就类似于linux中让你输密码一样，linux输入的密码都是\*显示，而这里是\*都不显示。但是输入的东西，已经在流中了，程序可以获取到。只是用户在命令窗口，看不到自己输入的东西

|  |  |
| --- | --- |
| [**PrintWriter**](https://docs.oracle.com/javase/8/docs/api/java/io/PrintWriter.html) | [**writer**](https://docs.oracle.com/javase/8/docs/api/java/io/Console.html#writer--)()   获取Console中的唯一[**PrintWriter**](https://docs.oracle.com/javase/8/docs/api/java/io/PrintWriter.html) 对象 |

|  |
| --- |
| 实例: |
| import java.io.Console;  **import** java.io.IOException;  **import** java.io.PrintWriter;  public class ConsoleTest {  **public** **static** **void** main(String[] args) {  Console cnsl = System.*console*();  PrintWriter out = cnsl.writer();//获取writer后，就可以向console输出内容了  //console将会显示这段字符串。等同于直接使用Console.printlf()  out.println("Here is The Optimus Prime!!");  }  } |