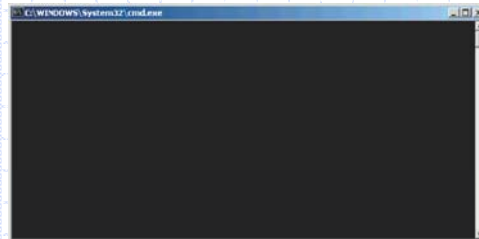


Chapter 2: Java Fundamentals

Input and Output
statements

Standard Output Window

- Using **System.out**, we can output multiple lines of text to the standard output window.



- The exact style of standard output window depends on the Java tool you use.

The println Method

- We use **println** instead of **print** to skip a line.

```
int x = 123, y = x + x;
System.out.println( "Hello, Dr. Caffeine." );
System.out.print( " x = " );
System.out.println( x );
System.out.print( " x + x = " );
System.out.println( y );
System.out.println( " THE END" );
```

```
C:\WINNT\System32\cmd.exe
Hello, Dr. Caffeine.
x = 123
x + x = 246
THE END
```

Standard Input

- To input primitive data values, we use the Scanner class.
- 4 steps are needed to be able to use input primitive:
 - Step 1: import the Scanner class:
 - `import java.util.Scanner;`
 - Step 2 : declaring a reference variable of a Scanner
 - `Scanner read ; //we named the object read`
 - Step 3: creating an instance of the Scanner
 - `read = new Scanner (System.in);`
 - Step 4: use specific methods to enter data
 - `int x = read.nextInt();`

Example

```

1 import Java.util.Scanner;

2 Scanner input ; // declaring the reference variable of a Scanner

3 int area ,length, width; // declaring variables to store entries

4 input = new Scanner (System.in); // creating an instance

5 length = input.nextInt(); //reading the length from the keyboard

6 width = input.nextInt(); //reading the width from the keyboard

7 area = length * width ; // computing the area

    // displaying the result

8 System.out.println("the legnth is "+ lenght);

9 System.out.println("the width is "+ width);

10 System.out.println("the area is "+ area);

```

Common Scanner Methods

• Method

Example

```
Scanner input = new Scanner (System.in);
```

nextByte()	byte b = input.nextByte();
nextDouble()	double d = input.nextDouble();
nextFloat()	float f = input.nextFloat();
nextInt()	int i = input.nextInt();
nextLong()	long l = input.nextLong();
nextShort()	short s = input.nextShort();
next()	String str = input.next();