A+ Computer Science
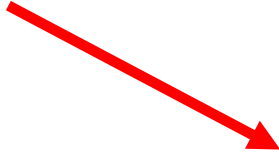
INPUT

Imports

Scanner Import

import   java.util.Scanner;

Try to be as specific as possible when using an import.

Scanner Creation

reference variable

Scanner keyboard =

new Scanner(System.in);

object instantiation

Scanner Methods

Scanner
frequently used methods

Name	Use
nextInt()	returns the next int value
nextDouble()	returns the next double value
nextFloat()	returns the next float value
nextLong()	returns the next long value
nextByte()	returns the next byte value
nextShort()	returns the next short value
next()	returns the next one word String
nextLine()	returns the next multi word String

```
import java.util.Scanner;
```

Integer Input

Reading Integer Values

Scanner keyboard =
**   new Scanner(System.in);**

out.print("Enter an integer :: ");
int num = keyboard.nextInt();

Reading Integer Values

```
out.print("Enter an integer :: ");
int num = keyboard.nextInt();
out.println(num);
```
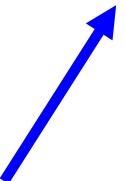
INPUT
2001

OUTPUT
Enter an integer :: 2001
2001

Reading Integer Values

reference variable

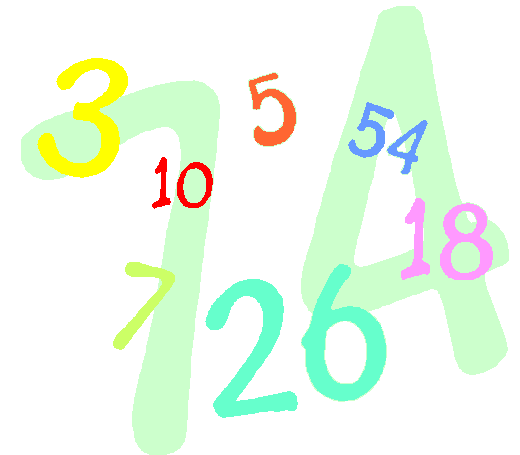int num = **keyboard**.**nextInt()**;

method call
non-void / return

Reading Integer Values

System.out.print("Enter an integer :: ");

Prompts are used to tell the user what you want.

int_input.java

Double
Input

Reading Decimal Values

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


out.print("Enter a double :: ");
double num = keyboard.nextDouble();
```

Reading Decimal Values

reference variable

double num = keyboard.nextDouble();

**method call
non-void / return**

double_input.java

String Input

Reading String Values

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

out.print("Enter a string :: ");
String word = keyboard.next();
```

Reading String Values

reference variable

String word = keyboard.next();

**method call
non-void / return**

Reading String Values

```
out.print("Enter a string :: ");
String word = keyboard.next();
out.println(word);
```

INPUT

I love A+ compsci.

OUTPUT

Enter a string :: I love A+ compsci.
I

Reading String Values

```java
Scanner keyboard =
        new Scanner(System.in);

out.print("Enter a sentence :: ");
String sentence = keyboard.nextLine();
```

Reading String Values

```
out.print("Enter a line :: ");
String line = keyboard.nextLine();
out.println(line);
```

INPUT
I love A+ compsci.

OUTPUT
Enter a line :: I love A+ compsci.
I love A+ compsci.

string_input.java

Input Issues

Input Issues

```
out.print("Enter an integer :: ");
int num = keyboard.nextInt();
out.print("Enter a sentence :: ");
String sentence = keyboard.nextLine();
out.println(num + " "+sentence);
```

INPUT
34
picks up \n

OUTPUT
Enter an integer :: 34
Enter a sentence :: 34

nextLine() picks up whitespace.

Input Issues

```
out.print("Enter an integer :: ");
int num = keyboard.nextInt();
keyboard.nextLine();          //pick up whitespace
out.print("Enter a sentence :: ");
String sentence = keyboard.nextLine();
out.println(num + " "+sentence);
```

OUTPUT
Enter an integer :: 34
Enter a sentence :: picks up \n
34 picks up \n

INPUT
34
picks up \n

nextLine() picks up whitespace.

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input_issues.java

Multi Value Input

Reading Multiple Values

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


out.println(keyboard.nextInt());
out.println(keyboard.nextInt());
out.println(keyboard.nextInt());
```

Reading Multiple Values

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


out.println( keyboard.nextInt()
        + keyboard.nextInt() );
```

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Reading Multiple Values

Scanner keyboard =
       new Scanner(System.in);

int sum = keyboard.nextInt();
sum = sum + keyboard.nextInt();
sum = sum + keyboard.nextInt();
System.out.println(sum);

OUTPUT
8

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multi_input.java

Work on Programs!

Crank Some Code!

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INPUT