

A+ Computer Science

# INPUT

# Imports

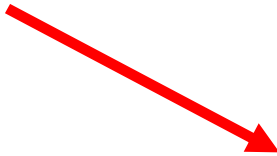
# Scanner Import

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

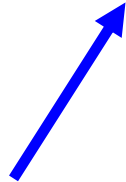
**Try to be as specific as possible when using an import.**

# Scanner Creation

reference variable



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



object instantiation

# Scanner Methods

# Scanner

## frequently used methods

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

# Reading Integer Values

```
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**

# 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

```
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

```
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);
```

## OUTPUT

```
Enter an integer :: 34  
Enter a sentence :: 34
```

## INPUT

```
34  
picks up \n
```

**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.**

# input\_issues.java

# Reading Multiple Values

**INPUT**

**7 5 3 1 8**

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

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

**OUTPUT**

**7**

**5**

**3**

# multi\_input.java

**Work on Programs!**

**Crank**

**Some Code!**



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# INPUT