

Java User Input

There are different ways to read inputs for the Java program and the most favoured technique is the Scanner. It is found in the `java.util` package. In the next example, we will use the `nextFloat()` method to read a value of type `Float`:

```
import java.util.Scanner;           // Import the Scanner class

public class JavaInputExample {

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in); // Create a Scanner object
        System.out.print("Enter your Float value:");

        float f = input.nextFloat();          // Read user input

        input.close();                      // Closes the Scanner object

        System.out.println(f);

    }                                     //main

}                                         //class
```



Java Comparison Operators

- **Note:** import is a keyword that used to import built-in and user-defined packages into the Java program.
- The following table describes various methods that used to read each data types:

Method	Description
nextBoolean()	Reads a boolean value from the user
nextByte()	Reads a byte value from the user
nextDouble()	Reads a double value from the user
nextFloat()	Reads a float value from the user
nextInt()	Reads an int value from the user
nextLine()	Reads a String value from the user
nextLong()	Reads a long value from the user
nextShort()	Reads a short value from the user

```

import java.util.Scanner;

public class JavaInputExample2 {

    public static void main(String[] args) {

        Scanner input = new Scanner(System.in);

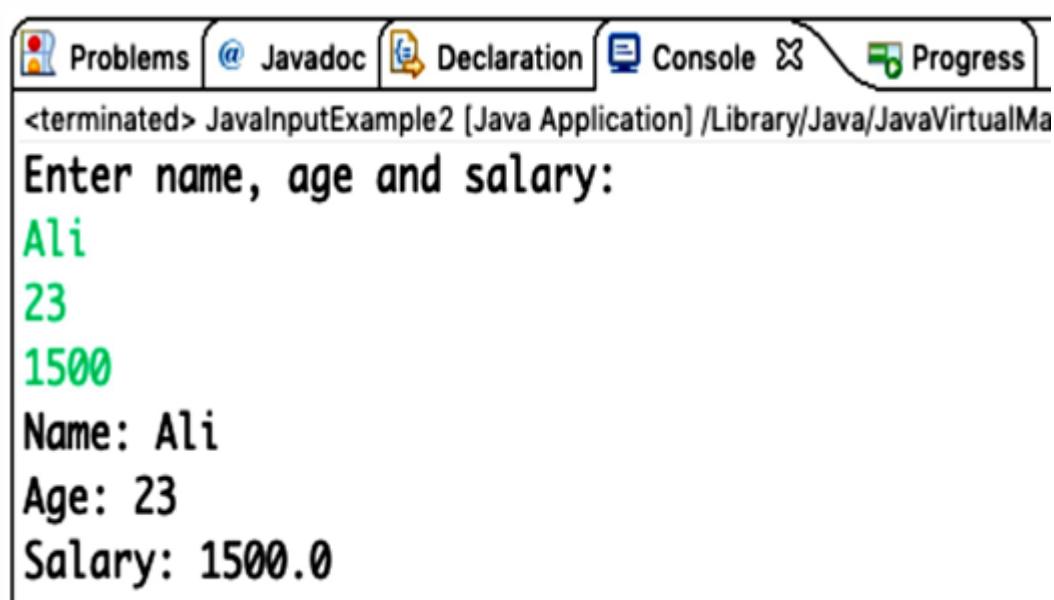
        System.out.println("Enter name, age and salary:");

        String name = input.nextLine();           // Input of type String

        int age = input.nextInt();                // Input of type Integer
    }
}

```

```
double salary = input.nextDouble();           // Input of type Double  
  
input.close();  
  
System.out.println("Name: " + name);  
  
System.out.println("Age: " + age);  
  
System.out.println("Salary: " + salary);  
  
}  
  
}
```



The screenshot shows the Eclipse IDE interface with the following details:

- Toolbar:** Problems, Javadoc, Declaration, Console, Progress.
- Console Tab:** Shows the message: <terminated> JavaInputExample2 [Java Application] /Library/Java/JavaVirtualMa
- Output Area:** Displays the prompt "Enter name, age and salary:" followed by three user inputs: "Ali", "23", and "1500".
- Result Area:** Displays the program's output: "Name: Ali", "Age: 23", and "Salary: 1500.0".

Java Program Examples with Output

Example 1

```
// Prefix increment and postfix increment operators.

public class AutoIncrement {

    public static void main( String[] args ){

        int c;

        // demonstrate postfix increment operator

        c=5;                      //assign 5 to c

        System.out.println( c );    // prints 5

        System.out.println( c++ );  // prints 5 then the increment

        System.out.println( c );    // prints 6

        System.out.println();       // skip a line

        // demonstrate prefix increment operator

        c=5;                      //assign 5 to c

        System.out.println( c );    // prints 5

        System.out.println( ++c );  // the increment then prints 6

        System.out.println( c );    // prints 6

    }      //  end main

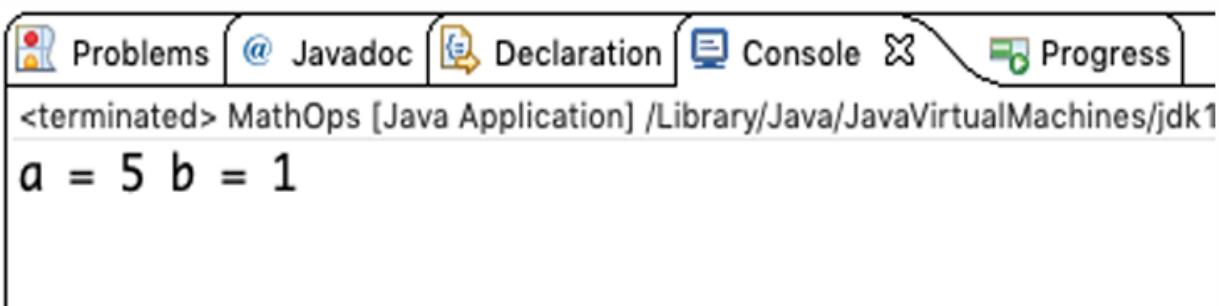
}      //  end class AutoIncrement
```



```
<terminated> AutoIncrement [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_261/bin/java -jar AutoIncrement.jar
5
5
6
5
6
6
```

Example 2

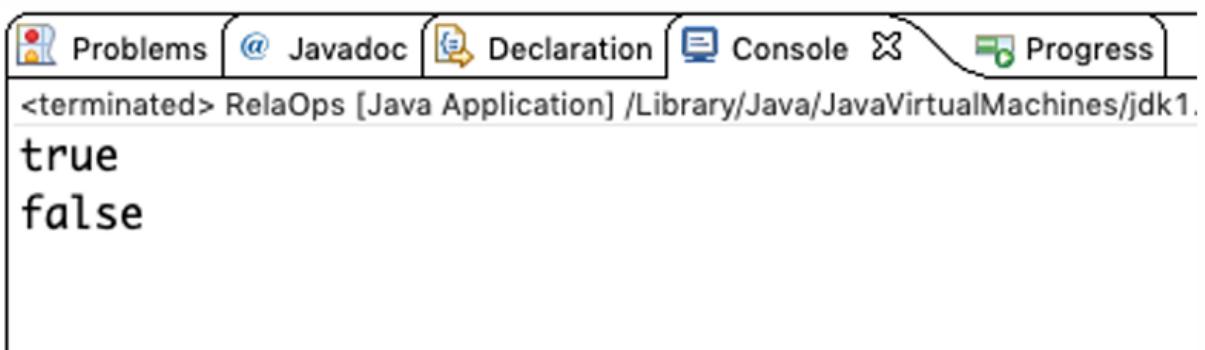
```
public class MathOps {  
  
    public static void main(String[] args){  
  
        int x = 1, y = 2, z = 3;  
  
        int a = x + y - 2/2 + z;  
  
        int b = x + (y - 2)/(2 + z);  
  
        System.out.println("a = " + a + " b = " + b);  
  
    } }
```



```
<terminated> MathOps [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_261/bin/java -jar MathOps.jar
a = 5 b = 1
```

Example 3

```
public class RelaOps {  
  
    public static void main(String[] args) {  
  
        int n1 = 47;  
  
        int n2 = 47;  
  
        System.out.println(n1 == n2);  
  
        System.out.println(n1 != n2);  
  
    } }
```



The screenshot shows the Eclipse IDE interface with the 'Console' tab selected. The output window displays the results of the Java application 'RelaOps'. It shows two lines of text: 'true' and 'false', indicating that the equality and inequality operators correctly compared the integer values 47 and 47.

```
<terminated> RelaOps [Java Application] /Library/Java/JavaVirtualMachines/jdk1.  
true  
false
```

Java program to print result of all Java operation

```
import java.util.Scanner;           // program uses class Scanner

public class LogicalOps {

    public static void main(String[] args) {

        // create a Scanner to obtain input from the user

        Scanner scanner = new Scanner( System.in );

        int i;

        int j;

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

        i = scanner.nextInt();

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

        j = scanner.nextInt();

        scanner.close();

        System.out.println("i > j is " + (i > j));

        System.out.println("i < j is " + (i < j));

        System.out.println("i >= j is " + (i >= j));

        System.out.println("i <= j is " + (i <= j));

        System.out.println("i == j is " + (i == j));

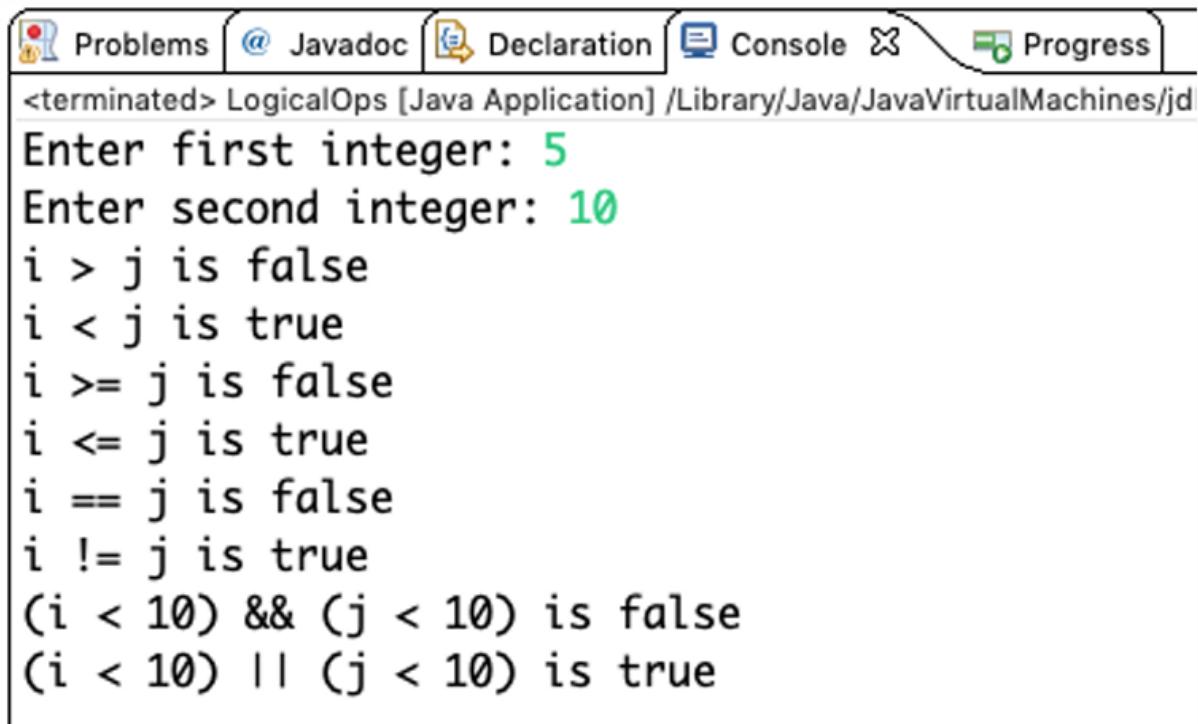
        System.out.println("i != j is " + (i != j));
    }
}
```

```
System.out.println("(i < 10) && (j < 10) is "+ ((i < 10) && (j < 10)));
```

```
System.out.println("(i < 10) || (j < 10) is "+ ((i < 10) || (j < 10)));
```

```
}
```

```
}
```



The screenshot shows the Eclipse IDE interface with the following details:

- Top bar: Problems, Javadoc, Declaration, Console, Progress.
- Console tab is active.
- Output window content:
-> LogicalOps [Java Application] /Library/Java/JavaVirtualMachines/jd
Enter first integer: 5
Enter second integer: 10
i > j is false
i < j is true
i >= j is false
i <= j is true
i == j is false
i != j is true
(i < 10) && (j < 10) is false
(i < 10) || (j < 10) is true

Thank You

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" هناك من يتذمر لأن للورد شوكا،

وهناك من يتفايل لأن فوق الشوك وردة "