

Ejercicio 1

The image displays two screenshots of an IDE (IntelliJ IDEA) showing the debugging process of a Java program. The program is named `Ejercicio1` and is located in the `src > ejercicios_depuracion > Ejercicio1.java` file.

Top Screenshot:

- VARIABLES:** Shows local variables: `args = String[0]@9`, `teclado = Scanner...`, `suma = 17`, and `num = 8`.
- BREAKPOINTS:** A breakpoint is set at line 13, which is highlighted in yellow.
- CALL STACK:** Shows the current method `Ejercicio1.main(String[] args)` and its callers.
- DEBUG CONSOLE:** Displays the output of the program, showing the prompt "Introduzca un número:" and the input values 2, 3, 4, and 8.

Bottom Screenshot:

- VARIABLES:** Shows local variables: `args = String[0]@14`, `teclado = Scanner...`, `suma = 610`, and `num = 200`.
- BREAKPOINTS:** A conditional breakpoint is set at line 13, with the condition `suma > 500`.
- CALL STACK:** Shows the current method `Ejercicio1.main(String[] args)` and its callers.
- DEBUG CONSOLE:** Displays the output of the program, showing the prompt "Introduzca un número:" and the input values 400, 10, and 200.

Ejercicio 2

The screenshot shows the Eclipse IDE with the file `Ejercicio2.java` open. The left sidebar contains the **VARIABLES** panel, **BREAKPOINTS** panel, and **WATCH** panel. The **VARIABLES** panel shows local variables: `args = String[0]@14`, `teclado = Scanner...`, `n = 6`, and `contador = 3`. The **BREAKPOINTS** panel shows a breakpoint at line 15 of `Ejercicio2.java` with the condition `contador == (n/2)`. The **WATCH** panel is empty. The main editor shows the code for `Ejercicio2`, which is a class with a `main` method. The code includes a `Scanner` object, a loop to read input, and a `while` loop that prints multiplication tables. The **CALL STACK** panel shows the current thread `Ejercicio2.main(String[] args)` and its callers.

```
5 public class Ejercicio2 {
    Run | Debug | Run main | Debug main
    public static void main(String[] args) { args = String[0]@14
        Scanner teclado = new Scanner(System.in); teclado = Scanner@15
        int n, contador = 1; n = 6, contador = 3
        System.out.print(s:"Introduzca un número: ");
        n = teclado.nextInt(); n = 6, teclado = Scanner@15
        while (contador <= n) { contador = 3, n = 6
            println(x:" * ");
            contador = 3
        }
    }
}
```

Ejercicio 3

The screenshot shows the Eclipse IDE with the file `Ejercicio3.java` open. The left sidebar contains the **VARIABLES** panel, **BREAKPOINTS** panel, and **WATCH** panel. The **VARIABLES** panel shows local variables: `args = String[0]@14`, `VALOR_INICIAL = 10`, `VALOR_FINAL = 100`, `PASO = 10`, `fahrenheit = 50`, and `celsius = 10,000000`. The **BREAKPOINTS** panel shows a breakpoint at line 17 of `Ejercicio3.java` with the condition `celsius == 10`. The **WATCH** panel is empty. The main editor shows the code for `Ejercicio3`, which is a class with a `main` method. The code includes variables for `fahrenheit` and `celsius`, a `while` loop to convert temperatures, and a `for` loop to print the results. The **CALL STACK** panel shows the current thread `Ejercicio3.main(String[] args)` and its callers.

```
3 public class Ejercicio3 {
    public static void main(String[] args) {
        int fahrenheit; fahrenheit = 50
        double celsius; celsius = 10,000000
        fahrenheit = VALOR_INICIAL; fahrenheit = 50, VALOR_INICIAL = 10
        System.out.printf(format:"Fahrenheit\tCelsius\n");
        while (fahrenheit <= VALOR_FINAL) { fahrenheit = 50,
            VALOR_FINAL = 100
            celsius = 5 * (fahrenheit - 32) / 9.0; celsius = 10,000000,
            bit = 50
            ut.printf(format:"%7d\t%8.3f\n", fahrenheit,
            fahrenheit += PASO;
        }
    }
}
```

Ejercicio 4

The screenshot shows the Eclipse IDE with the file `Ejercicio4.java` open. The code is as follows:

```
public class Ejercicio4 {  
    public static void main(String[] args) {  
        args = String[0]@14  
        int valor; valor = 1001  
        Scanner in = new Scanner(System.in); in = Scanner@15  
        do {  
            System.out.print(s:"Escribe un entero < 100: ");  
            in.nextInt(); valor = 1001, in = Scanner@15  
            lor >= 100); valor = 1001  
            System.out.println("Ha introducido: " + valor);  
        }  
    }  
}
```

A breakpoint is set at line 13. The **VARIABLES** panel shows:

- `args = String[0]@14`
- `valor = 1001`
- `in = Scanner@15`

The **BREAKPOINTS** panel shows the breakpoint is active. The **DEBUG CONSOLE** shows the following output:

```
PS D:\Entornos de Desarrollo\Java ENDES> & 'C:\Users\dami1a15\AppData\Local\Programs\Eclipse Adoptium\jdk-21.0.4.7-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,address=localhost:53584' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\dami1a15\AppData\Roaming\Code\User\workspaceStorage\015fc244106cd78039800f512b4066ee\redhat.java\jdt_ws\Java ENDES_acaee4f\bin' 'ejercicios_depuracion.Ejercicio4'  
Escribe un entero < 100: 999  
Escribe un entero < 100: 1000  
Escribe un entero < 100: 1001  
[
```

Ejercicio 5

The screenshot shows the Eclipse IDE with the file `Ejercicio5.java` open. The code is as follows:

```
public class Ejercicio5 {  
    public static void main(String[] args) {  
        args = String[0]@14  
        int n; n = 5  
        Scanner sc = new Scanner(System.in); sc = Scanner@15  
        do {  
            System.out.print(s:"Escribe un número entre 1 y 10: ");  
            t(); n = 5, sc = Scanner@15  
            | n > 10); n = 5  
            System.out.println("Ha introducido: " + n);  
        }  
    }  
}
```

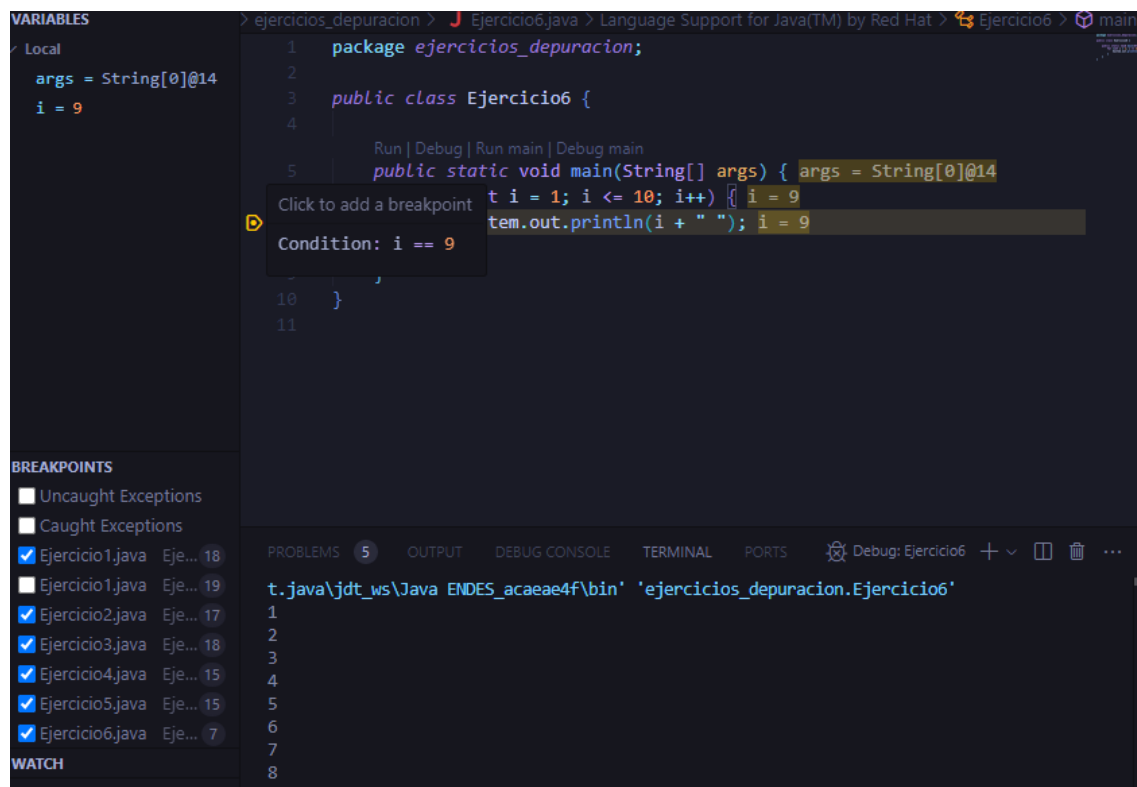
A breakpoint is set at line 13. The **VARIABLES** panel shows:

- `args = String[0]@14`
- `n = 5`
- `sc = Scanner@15`

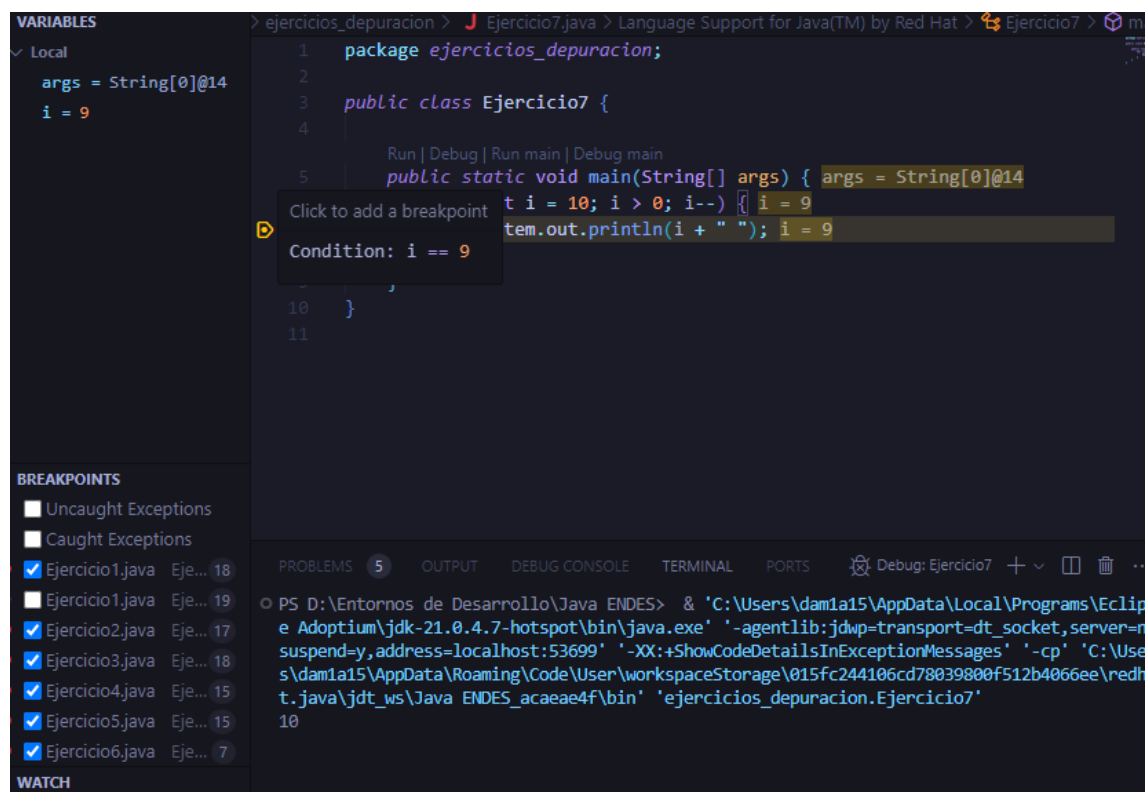
The **BREAKPOINTS** panel shows the breakpoint is active. The **DEBUG CONSOLE** shows the following output:

```
PS D:\Entornos de Desarrollo\Java ENDES> d:; cd 'd:\Entornos de Desarrollo\Java ENDES'; & 'C:\Users\dami1a15\AppData\Local\Programs\Eclipse Adoptium\jdk-21.0.4.7-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,address=localhost:53657' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\dami1a15\AppData\Roaming\Code\User\workspaceStorage\015fc244106cd78039800f512b4066ee\redhat.java\jdt_ws\Java ENDES_acaee4f\bin' 'ejercicios_depuracion.Ejercicio5'  
Escribe un número entre 1 y 10: 2  
Ha introducido: 2  
[
```

Ejercicio 6



Ejercicio 7



Ejercicio 8

VARIABLES

Local

- args = String[0]@14
- VALOR_INICIAL = 10
- VALOR_FINAL = 100
- PASO = 10
- fahrenheit = 60

BREAKPOINTS

- ☐ Uncaught Exceptions
- ☐ Caught Exceptions
- ☒ Ejercicio1.java Eje... 18
- ☒ Ejercicio2.java Eje... 19
- ☒ Ejercicio3.java Eje... 17
- ☒ Ejercicio4.java Eje... 18
- ☒ Ejercicio5.java Eje... 15
- ☒ Ejercicio6.java Eje... 7

WATCH

CALL STACK

```
3 public class Ejercicio8 {
5     public static void main(String[] args) {
10         int fahrenheit; fahrenheit = 60
11         double celsius;
12
13         fahrenheit = VALOR_INICIAL; fahrenheit = 60, VALOR_INICIAL = 10
14
15         System.out.printf(format:"Fahrenheit\tCelsius\n");
16         for (fahrenheit = VALOR_INICIAL; fahrenheit <= VALOR_FINAL;
            fahrenheit += PASO) { fahrenheit = 60, VALOR_INICIAL = 10,
17             .3f\n", fahrenheit,
18             celsius);
19         }
20     }
21 }
22
```

Click to add a breakpoint

Condition: fahrenheit >= 60 && fahrenheit <= 90

9.0; fahrenheit = 60

Fahrenheit Celsius

10	-12,222
20	-6,667
30	-1,111
40	4,444
50	10,000

VARIABLES

Local

- args = String[0]@14
- VALOR_INICIAL = 10
- VALOR_FINAL = 100
- PASO = 10
- fahrenheit = 90

BREAKPOINTS

- ☐ Uncaught Exceptions
- ☐ Caught Exceptions
- ☒ Ejercicio1.java Eje... 18
- ☒ Ejercicio2.java Eje... 19
- ☒ Ejercicio3.java Eje... 17
- ☒ Ejercicio4.java Eje... 18
- ☒ Ejercicio5.java Eje... 15
- ☒ Ejercicio6.java Eje... 7

WATCH

CALL STACK

```
3 public class Ejercicio8 {
5     public static void main(String[] args) {
10         int fahrenheit; fahrenheit = 90
11         double celsius;
12
13         fahrenheit = VALOR_INICIAL; fahrenheit = 90, VALOR_INICIAL = 10
14
15         System.out.printf(format:"Fahrenheit\tCelsius\n");
16         for (fahrenheit = VALOR_INICIAL; fahrenheit <= VALOR_FINAL;
            fahrenheit += PASO) { fahrenheit = 90, VALOR_INICIAL = 10,
17             .3f\n", fahrenheit,
18             celsius);
19         }
20     }
21 }
22
```

Click to add a breakpoint

Condition: fahrenheit >= 60 && fahrenheit <= 90

9.0; fahrenheit = 90

Fahrenheit Celsius

10	-12,222
20	-6,667
30	-1,111
40	4,444
50	10,000
60	15,556
70	21,111
80	26,667

Ejercicio 9

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

- VARIABLES:** Local variables: `args = String[0]@14`, `a = 3`, `b = 5`.
- BREAKPOINTS:** A list of breakpoints for various `EjercicioX.java` files. The breakpoint for `Ejercicio9.java` is checked.
- Code Editor:** The source code for `Ejercicio9.java` is displayed. A conditional breakpoint is set on line 6, with the condition `(a + b) > 7`. The code includes a package declaration, a class definition, and a `main` method that initializes `a` and `b`, and enters a loop.
- DEBUG CONSOLE:** The output of the program is shown, indicating the execution of the `main` method and the values of `a` and `b` at different points in the loop.

```
1 package ejercicios_depuracion;
2
3 public class Ejercicio9 {
4
5     Run | Debug | Run main | Debug main
6     public static void main(String[] args) { args = String[0]@14
7         int a, b; a = 3, b = 5
8
9         while (a + b < 10; a++, b += 2) { a = 3, b = 5
10             .out.println("a = " + a + " b = " + b + " a + b = " +
11             ); a = 3, b = 5
12
13     }
```

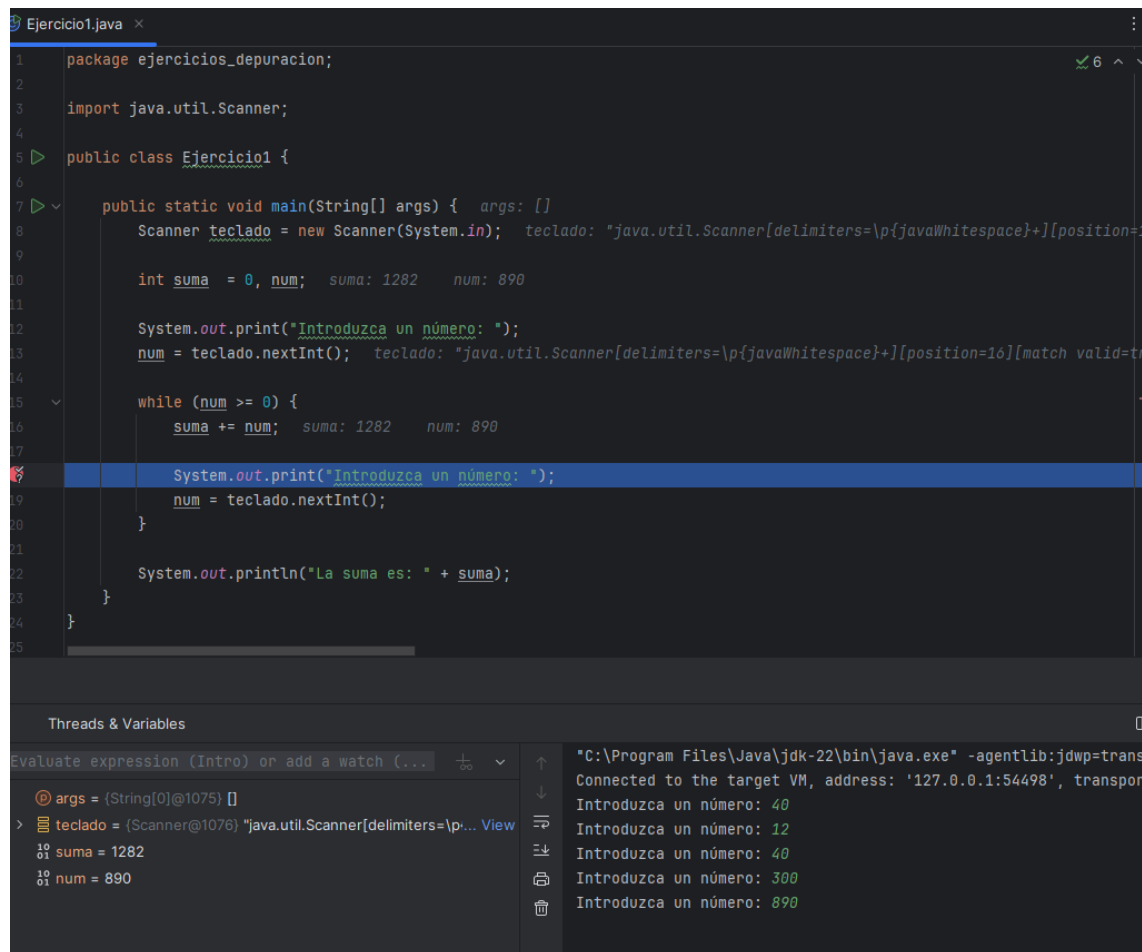
Condition: `(a + b) > 7`

DEBUG CONSOLE:

```
PS D:\Entornos de Desarrollo\Java ENDES> & 'C:\Users\dami1a15\AppData\Local\Programs\Eclipse
e Adoptium\jdk-21.0.4-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,
suspend=y,address=localhost:54230' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\User
s\dami1a15\AppData\Roaming\Code\User\workspaceStorage\015fc244106cd78039800f512b4066ee\redha
t.java\jdt_ws\Java ENDES_acaeae4f\bin' 'ejercicios_depuracion.Ejercicio9'
a = 1 b = 1 a + b = 2
a = 2 b = 3 a + b = 5
```

Ejercicio 10

Ejercicio 2



```
package ejercicios_depuracion;

import java.util.Scanner;

public class Ejercicio1 {

    public static void main(String[] args) {
        Scanner teclado = new Scanner(System.in);

        int suma = 0, num;

        System.out.print("Introduzca un número: ");
        num = teclado.nextInt();

        while (num >= 0) {
            suma += num;

            System.out.print("Introduzca un número: ");
            num = teclado.nextInt();
        }

        System.out.println("La suma es: " + suma);
    }
}
```

Threads & Variables

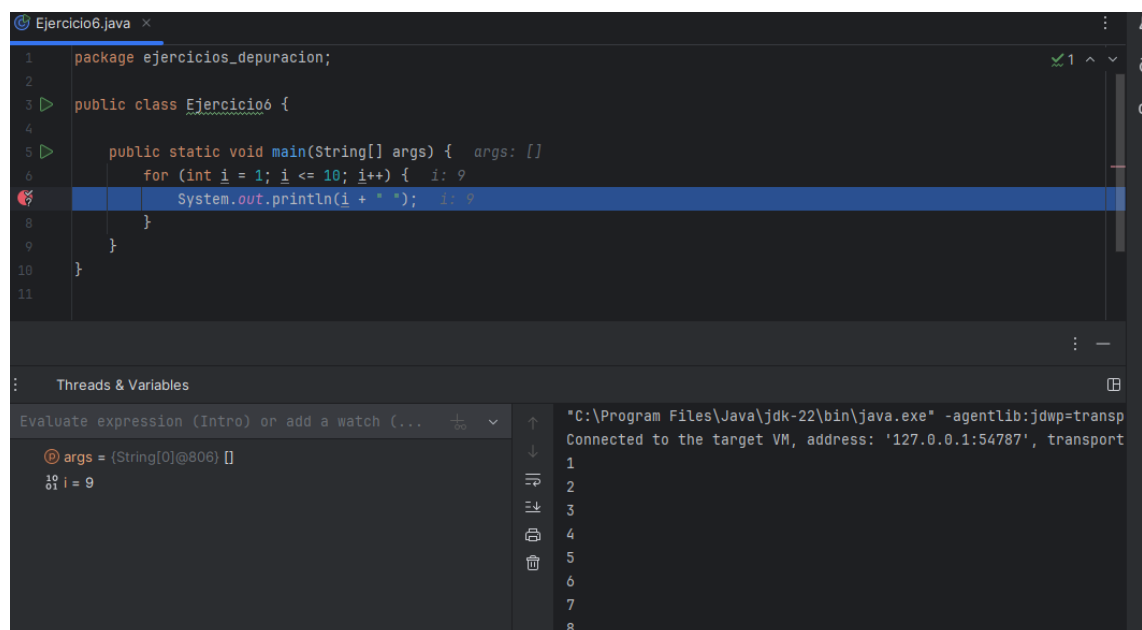
Evaluate expression (Intro) or add a watch (...)

- args = {String[0]@1075} []
- teclado = {Scanner@1076} "java.util.Scanner[delimiters=\p{javaWhitespace}+][position=3]"
- suma = 1282
- num = 890

"C:\Program Files\Java\jdk-22\bin\java.exe" -agentlib:jwp=trans
Connected to the target VM, address: '127.0.0.1:54498', transport

Introduzca un número: 40
Introduzca un número: 12
Introduzca un número: 40
Introduzca un número: 300
Introduzca un número: 890

Ejercicio 6



```
package ejercicios_depuracion;

public class Ejercicio6 {

    public static void main(String[] args) {
        for (int i = 1; i <= 10; i++) {
            System.out.println(i + " ");
        }
    }
}
```

Threads & Variables

Evaluate expression (Intro) or add a watch (...)

- args = {String[0]@806} []
- i = 9

"C:\Program Files\Java\jdk-22\bin\java.exe" -agentlib:jwp=transp
Connected to the target VM, address: '127.0.0.1:54787', transport

1
2
3
4
5
6
7
8