



# Chapitre 11

# Debugging

*Debugging in IntelliJ*

# Debugging

## 1. L'exemple du Calculator

# L'exemple du Calculator

Soit la classe *Calculator*

```
@Service
public class Calculator {

    public Double add (Double number1, Double number2)
    { return number1 + number2; }

    public Double subtract (Double number1, Double number2)
    { return number1 - number2; }

    public Double multiply (Double number1, Double number2)
    { return number1 * number2; }

    public Double divide (Double number1, Double number2) throws DivisionException {
        if (number2 == 0) throw new DivisionException(number2);
        else return number1 / number2; }
}
```

# L'exemple du Calculator

## Exemples d'utilisation de la classe *Calculator*

- *Calculator calculator = new Calculator();*

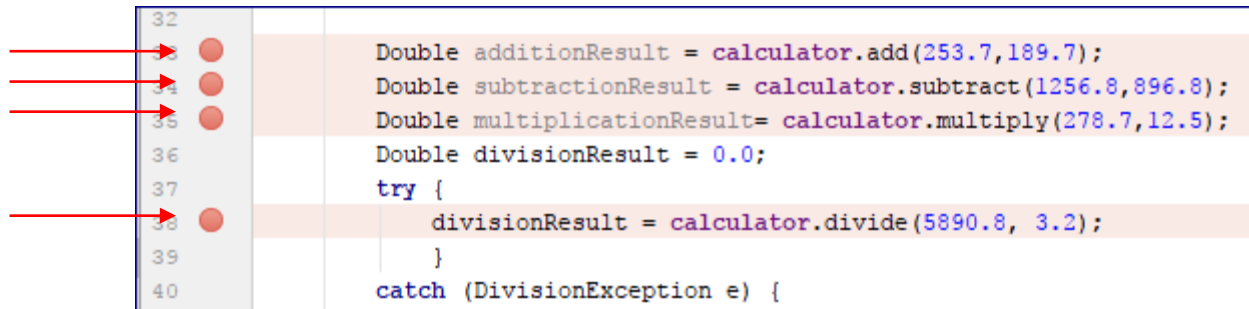
```
Double additionResult = calculator.add(253.7,189.7);
Double subtractionResult = calculator.subtract(1256.8,896.8);
Double multiplicationResult= calculator.multiply(278.7,12.5);
Double divisionResult = 0.0;
try {
    divisionResult = calculator.divide(5890.8, 3.2);
}
catch (DivisionException e) {
```

# Debugging

1. L'exemple du Calculator
2. Breakpoints

# Breakpoints

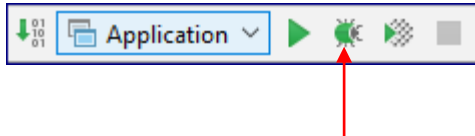
- Placer des breakpoints
  - En cliquant dans la colonne de gauche



# Debugging

1. L'exemple du Calculator
2. Breakpoints
3. Debug de l'application

# Debug de l'application



⇒ L'exécution stoppe au premier break point

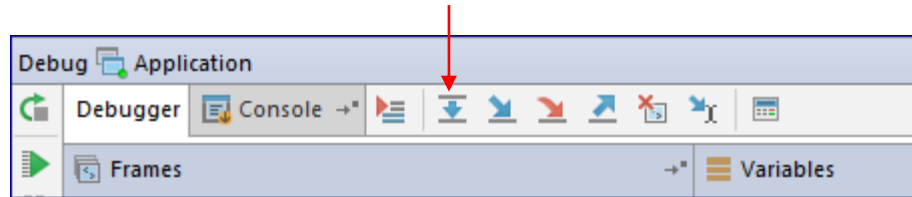
```
✓ Double additionResult = calculator.add(253.7,189.7); calculator: Calculator#4943
✓ Double subtractionResult = calculator.subtract(1256.8,896.8);
✓ Double multiplicationResult= calculator.multiply(278.7,12.5);
Double divisionResult = 0.0;
try {
✓   divisionResult = calculator.divide(5890.8, 3.2);
}
catch (DivisionException e) {
```



# Debug de l'application

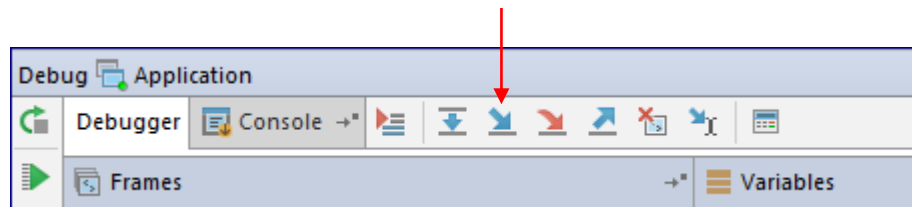
## Step Over (F8)

- Pour passer à l'étape suivante



## Step Into (F7)

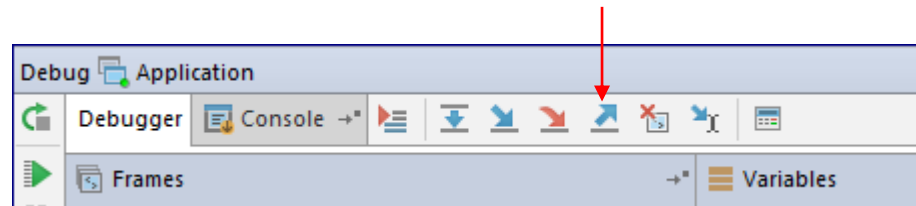
- Pour visiter l'intérieur de la méthode



# Debug de l'application

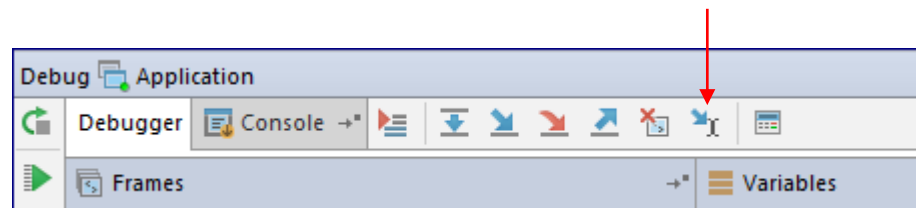
## Step Out (Maj + F8)

- Pour revenir à la méthode appelante



## Run to Cursor (Alt + F9)

- Pour aller au break point suivant ou terminer l'exécution



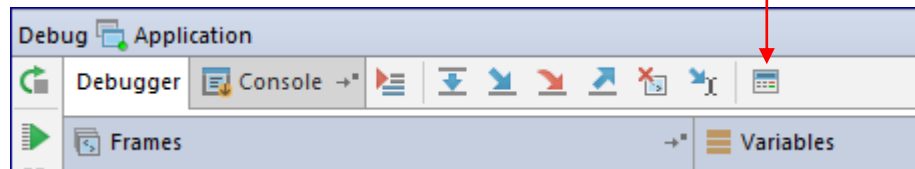
# Debugging

1. L'exemple du Calculator
2. Breakpoints
3. Debug de l'application
4. Evaluer les expressions

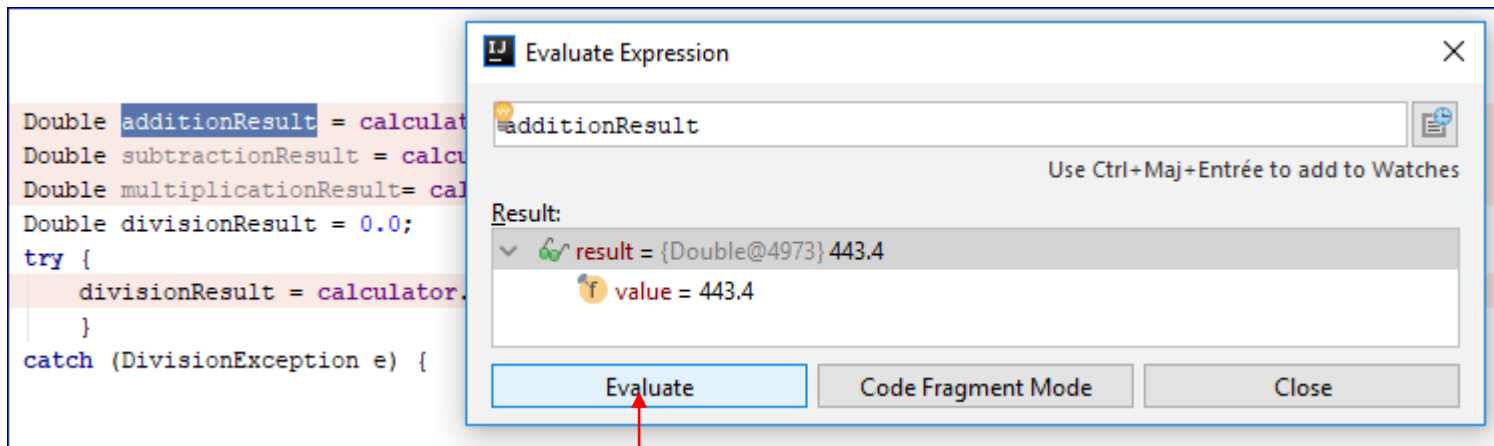
# Evaluer les expressions

Sélectionner une variable

⇒ Evaluate Expression (Alt + F8)



Ex, *additionResult*



# Evaluate Expression

Ou via la fenêtre debugger

⇒ cf. Variables

