

Tutorial: Exception Handling

Exercise 1: Write a method called *division* that takes as input two integers and returns the result of their division. This method should throw *ArithmeticException* if a division by zero occurs.

Exercise 2: Write a method called *interval* that takes as input two integers x & y and prints the interval between them $[x,y]$. x should be less than y , otherwise throw an *IllegalArgumentException*.

Exercise 3: Write a main method to test the *division* & *interval* methods from the previous exercises. This main method should handle the exceptions that those methods might throw using try-catch statements.

Exercise 4:

Triangle
- side1: int - side2: int - side3: int
+Triangle(int side1, int side2, int side3): +isValidTriangle(): boolean +getTriType(): String

Triangle

Attributes:

- *side1, side2, side3* : different sides for the triangle.

Methods:

- *Triangle(int side1, int side2, int side3)*: You must check the sides and throw (*IllegalArgumentException*) with a message when any of the sides given is 0 or less.

- *isValidTriangle()*: decides whether the sides given form a valid triangle or not based on the theorem that states that “ the sum of two side lengths of a triangle is always greater than the third side”.

- *getTriType()*: You must check the different sides and throw Exception with a message if the sides don't form a valid triangle, otherwise return the type of the triangle as follows:

- Equilateral Triangle when you have three equal sides
- Isosceles Triangle when you have two equal sides
- Scalene Triangle when you have no equal sides