

Week 1 - B

Exercise Description

Write a Java program that prints all real solutions to the quadratic equation $ax^2+bx+c=0$. Read in a , b , c and use the quadratic formula.

Java Scanner

The `Scanner` class is used to get user input, and it is found in the `java.util` package.

If you want to look at it you can do so by holding `Strg` and clicking on the class name, a new file opens with the `Scanner` class.

To use the `Scanner` class, create an object of the class and use any of the available methods found in the `Scanner` class documentation. In our example, we will use the `nextLine()` method, which is used to read Strings:

Discuss

What other datatypes than Strings can we read in?

integers, doubles, boolean, ...

This can be done by using different read methods, for example: `nextInt()` , `nextDouble()` , `nextBoolean()` , ...

Quadratic Equation

Now we know how the `Scanner` class works, therefore we can use it to read inputs for more complex calculations, in this case a quadratic equation.

Try to read the program code carefully to understand what happens in this code, then try to finish it.

Further Reading

Here are some links to learn more about these topics:

- Java Methods: https://www.w3schools.com/java/java_methods.asp
- Java Scanner: https://www.w3schools.com/java/java_user_input.asp