

Mobile App Development

Tutorial Assignment 4

Exercise 1 (Conditional statements)

Write a Java program that reads two integer numbers a and b and prints either

- the text "both numbers are equal" if $a = b$, or
- the lesser number of a and b , then the text " is less than ", and then the larger number of a and b .

Example: If the user enters 9 and 5, the output shall be: 5 is less than 9.

Run this app on the Android physical / virtual device.

Exercise 2 (Integer expressions and loops)

Write a Java program that reads an integer n , and then prints all square numbers $\leq n$.

Example: If the user enters 26, the output will be as follows: 1, 4, 9, 16, 25.

Run this app on the Android physical / virtual device.

Exercise 3 (Integer expressions and conditional statements)

Write a Java program that reads two integer numbers a and b , and then prints the integer quotient and remainder of a divided by b . The program shall print an error message if this would require a division by zero.

Example: If the user enters 7 and 3, the output shall be: 2, remainder 1.

Run this app on the Android physical / virtual device.

To develop the above-stated apps, please use the instructions written in 1st, 2nd, 3rd, and 4th presentations, as well as your skills in Java/C/C++/Python and/or other programming language(s) for conditional statements and loops.

Optional exercise: Develop Java Android application “MQTT Messenger” with the possibility to select the MQTT server and topics.

