Lab 4

Write a java program that asks the user to enter a 4-digit number and a math operator (addition, subtraction, multiplication, or division). Evaluate the number of digits, if the user's input has more or less than 4 digits, print an error message and do not continue the execution.

If the input is valid, your program should separate the user's input number to two 2-digit numbers. For instance:

If input = 2134 then num1 = 21 and num2= 34

After separation, apply the operator that the user entered and save the result in a variable.

So, if user enters 2134, and subtraction then the result is ➔ num1 – num2 = 21 – 34 = - 13

num1 cannot be zero (if it was then the input was not a 4-digit number), but make sure that if the operator is division, then num2 is not zero (prevent divided by zero). If num2 is zero and the operator is division, your program should print a message that the operator is invalid for the given input.

The output should include the num1, num2 and result in form of an equation.

Sample output:

```
Enter a 4-digit number:
2134
Enter an operator:
-
Input number: 2134
Number 1: 21
Number 2: 34
Result: 21 - 34 = -13
```

Another sample with error message:

```
Enter a 4-digit number:
1200
Enter an operator:
/
Invalid operator for the given number!!!
```