



# **INF212**

## **Variables and operators**

### **LABORATORY LEAFLET**

**STUDENTS VERSION**

## **LABORATORY-1: How to write the simplest programs**

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### **LABORATORY 1**

<b>Preliminary Study and Tasks</b>	<b>Statement</b>	<b>Explanation</b>
<b>1</b>	<b>Declaration, math, stdbool</b>	<b>Simple mathematical operator</b>
<b>2</b>	<b>Boolean, equality, 'not' utilizations</b>	<b>Relational operators</b>
<b>3</b>	<b>Mathematical function input/output schemes</b>	<b>Mathematical function in Programming</b>

**Task 1: Ask the user for the numbers  $x$ ,  $y$  in integer format and  $z$  in double format. For these numbers, perform the operations  $x+y$ ,  $x*y$ ,  $x/y$  (the result will be double format) and  $x*y*z$  (the result will be double format) and print the results on the screen. Consider why the result of division (which is  $x/y$ ) cannot be done correctly.**

**Task 2: Ask the user for the integers x and y and print the results of the operators  $x > y$ ,  $x = y$ ,  $x! = Y$  and  $x > 0 \ \&\& \ y > 0$ .**

**Task 3: Request the x and y numbers in the double format to be used and print the outputs of the following functions on the screen.**

Fonk 1)  $f(x) = \sin(x) * \pi$   
Fonk 2)  $f(x) = \cos(x) * \pi$   
Fonk 3)  $f(x,y) = \sin(y) * \cos(x) * \pi$   
Fonk 4)  $f(x,y) = x * \sin(y) * \cos(x) * \pi$   
Fonk 5)  $f(x,y) = \exp(y) * x * \sin(x) * \cos(y) * \pi$