

Lab 2.2.29.1 Operators and shortcuts

Objectives

Familiarize the student with:

- Using operators,
- Using shortcut and pre/post increment/decrement operators,
- Building simple expressions,
- Translating verbal description into programming language

Scenario

Take a look at the code below: it assigns two integer values, manipulates them and finally outputs the *result* and *bigresult* variables. The problem is that the manipulations have been described using natural language, so the code is completely useless now.

We want you to act as an intelligent (naturally!) compiler and to translate the formula into real "C" code notation. It's the same code as the sixth lab about operators, but this time, try to use pre/post and short-cut operators - they fit perfectly into some of the steps.

Test your code using the data we have provided.

```
#include <stdio.h>

int main(void)
{
    int xValue=5;
    int yValue=9;
    int result;
    int bigResult;

    /*
    increment xValue by 3
    decrement yValue by xValue
    multiply xValue times yValue giving result
    increment result by result
    decrement result by 1
    assign result modulo result to yValue
    increment result by result added to xValue
    assign result times result times result to bigResult
    increment result by xValue times yValue
    */

    printf("result: %d\n", result);
    printf("big result: %d\n", bigResult);
    return 0;
}
```

Example output

```
result: 38
big result: 54872
```