

# Lab 1.4.1 Parentheses

# Objectives

Familiarize the student with:

- the order of operations;
- the use of parentheses to change the order of operations.

#### Scenario

Add some parentheses (none, one or two pairs) in the code below to get the expected results. Try to do this before you run the program.

```
#include <iostream>
#include <iomanip>
#include <string>

int main()
{
    float v=2;
    float result = v + 1 * 2;
    std::cout << "result: " << result << " expected result: 6" << std::endl;
    result = v + 1 * v + 2 * 2;
    std::cout << "result: " << result << " expected result: 24" << std::endl;
    result = v - 1 * 2 + 2 * 2;
    std::cout << "result: " << result << " expected result: 6" << std::endl;
    result = v - 1 * 2 + 2 * 2;
    std::cout << "result: " << result << " expected result: 6" << std::endl;
    result = v + v * v + v * 2;
    std::cout << "result: " << result << " expected result: 32" << std::endl;
    result = (int)v % 2 * v + 2 * 2;
    std::cout << "result: " << result << " expected result: 0" << std::endl;
}</pre>
```

### **Example input**

Add parentheses

# Example output

```
result: 6 expected result : 6
result: 24 expected result : 24
result: 6 expected result : 6
result: 32 expected result : 32
result: 0 expected result : 0
```