

Assignment 2

Reading and Exercises

- * Read Lesson 2 (online notes)
- * Read Chapter 2, pages 28-79, from the textbook. Pay special attention to operations like % (ask me if any doubts)

Programming with Words

Given the following program, answer the questions below:

- a) What is the value of n after the assignment $n = j - j / i * i$?
- b) What is the use of `#include <iostream>` ?
- c) If you have *int* x and do $x = 2.45$, the compiler will issue a warning, but it will compile. What is the effect of that assignment ?
- d) Why would the compiler issue a warning? What could be "dangerous" about that assignment? how come a warning is not issued when you assign an *int* value to a *float* variable ?
- e) Given a variable *float* f , what would be the value of f after assigning $f = 24$;

```
#include <iostream>

int main (void)
{
    int n, i =5, j = 8;
```

```

n = j - j / i * i ;
cout << "The result is " << "----->" << n;
return 0;
}

```

C++ Program

Write a program that prints to cout, separated by a space, the digits of any three digit integer. You will need one variable, named, for example, value, for the number (int value) to be broken down into its digits. You might also need other variables to store the digits as you get them.

The structure of your program could be:

```

#include <iostream>

int main()
{
    int number;

    int digit1, digit2, digit3; // place holders for the
    digits.

    cout << "Type a three digit number\n";
    cin >> number;

    // your code here

    return 0;
}

```

Hint: You can do this by using repeated divisions by 10, and remembering that dividing two integers always results in an integer. For example 6/5 would yield a result of 1. You can use the % operation

If you input a number like 345 your output should be 3 4 5 (its three digits separated by

a space)