

Programming Language (630203)

Assignment 2:

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Assignment 2:

Weighting: 5 % of the Module total

Date set: 15 April 2011

Date Due in: 10 June 2011

Submission Notes:

Completed work must be handed into my office. Sessions for oral discussion will be held in my office. After the deadline a nil mark will be awarded. The only exceptions are where you have permission to hand in later or have been ill and can produce appropriate evidence. In both cases a form (available from the dean secretary must be completed and submitted to the module teacher.

Objectives:

To test the student understanding of writing C++ programs Using Loops, functions, and Arrays.

1. Write a C++ program that Sums a sequence of integers. Assume that first integer specifies the number of values. Program should read only once value each time *cin* is executed.
2. Write a C++ program that finds the smallest of several integers. Assume that first integer specifies the number of values.
3. Write a C++ program that inputs a series of integers and passes them one at a time to function *even* to determine if an integer is even. Function should return 1 if integer is even and 0 otherwise.
4. Write a function in C++ that takes integer value and returns the value with its digits reversed. 7631 → 1367.
5. Write a C++ program that will help an elementary school students learn basic arithmetic operations. Use *rand* to produce two positive one digit integers. It should have a menu to choose an arithmetic operation. After what, student should type the question: **How much is 6 {+,-,*,/} 5?** Student types the answer. Your program checks it. If it is correct, print {"Very Good", "Excellent", ...}. And then ask the next question. If answer is wrong, print {"Very Bad", "No, please try again", ...}.and then let the student try to answer the same question again repeatedly until he gets the right answer.
6. Write a C++ program using function that will display at the left margin of screen a solid Square of "*", whose side is specified in integer *side*: for example if *side* = 4 → function should display:

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****
****
****
****
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7. Write a C++ program that sort an array in ascending order passing them to a function sort, using Pointers. Assume that first integer specifies the number of elements in array. Print the array before and after sorting

Assessment Criteria:

70%: Completing the solution.

30%: Demonstration.

The cover sheet of the handed work must contain the following items:

The Date due in:

The name of the module:

The name of the module teacher:

Your name and number:

Your section: