

## Lab7 – Functions

On Nov. 1st

1. Write a program that performs arithmetic operations. The program takes two numbers for the operation and additional number that indicates the type of the operation – 1: addition, 2: subtraction, 3: multiplication, 4: division (Assume that “division by zero” does not happen.). You should define and use the following function for the arithmetic operation: “arithmeric(int a, int b, int c)”.

Enter two numbers and type of operation:    5 10 1

Results of addition:                                15

2. Write a program that receives 10 integer numbers and print out the difference between the maximum number and minimum number of the 10 numbers using the two functions “int max(int A, int B)” and “int min(int A, int B)”, which receives two integers and returns the larger and smaller number between them, respectively:

Enter 10 numbers:                                3 12 -3 5 9 14 21 1 2 18

Difference in Max and Min:    24

3. Write a program that computes the value of the following polynomial:

$$2x^2 - 8x^3 + 3x^4 - 6x + 2x^5 - 3.$$

The program takes an input ( $x$ ) from the user, calls the function “int polynomial(int x)”, and then display the value returned by the function.

Enter x:    3

Results:    510