Course «C Programming Language»

Topic: Loops

Homework

Exercise 1.
Write a program that computes the sum of integers from A to 500 (the value of A is entered from the keyboard).

Exercise 2.
Write a program that requests two integers x and y, and then calculates and outputs the value of x to the power of y.

Exercise 3.
Find the average of all integers from 1 to 1000.

Exercise 4.
Find the product of all integers from A to 20 (the value A is entered from the keyboard: $1 <= a <= 20$).

Exercise 5.
Write a program that displays a multiplication table to k, where k is an option number. For example, for the 7th option:

   7 x 2 = 14
   7 x 3 = 21

Exercise 6.
Display all numbers from zero to a number entered by the user.

Exercise 7.
The user enters two boundaries of range; display to the screen all numbers from this range. You should consider that the user can enter range boundaries in an arbitrary order.

- you should output all even numbers from the range;
- you should output all odd numbers from the range;
- you should output all numbers that are divisible to 7.

Exercise 8.
The user enters two range boundaries. Calculate the sum of all numbers of range.

Exercise 9.
The user enters numbers using a keypad. Calculate the sum of these numbers and output it to the screen, as soon as the user enters zero.