**algorithmization and programming**

**defence 2 variant 1**

ACTIVITIES

Code the following tasks according to your variant.

(Grades: one task – 50 points, two tasks – 80 points, three tasks - 100)

**Variant1**

1. Enter a number (one number). Show the sum of all the digits in this number (clarification - the number can be any, two-digit, five-digit, etc.)

Ex:

**Input:** 1789

Sum = 1+7+8+9

**Output:** 25

1. Create an array of size 10 and enter all the numbers from the keyboard.

Zero out the elements to the right and left of the largest number.

Ex:

**Input:** 3 6 4 9 8 1 3 7 5 2

max = 9

**Output:** 3 6 0 9 0 1 3 7 5 2

1. Create an array of size 10 and enter all the numbers from the keyboard.

Sort the first half of the array in descending order, and the other half in ascending order. (Insertion Sort)

Ex:

**Input:** 3 6 5 3 9 8 1 4 3 9 0 7

3 6 5 3 9 8 -> 9 8 6 5 3 3

1 4 3 9 0 7 -> 0 1 3 4 7 9

**Output:** 9 8 6 5 3 3 0 1 3 4 7 9