## Variant 5

Programming I (IAG0581)

Homework assignment 2: Arrays anf Functions

We have a two-column array **A**, where the first column contains quantity of gold bars in bank cells. The maximum size (the number of rows) of the **A** array is fixed (see step 1); do not use **VLA**.

You task is to fill up the second column of **A**, which has to contain cipher keys of bank cells.

Make the C program according to the following steps:

1. The user enters the **N** number of bank cells. (**N** must be in range [1..**15**]).
2. The user enters the number of gold bars for each of the **N** bank cells.
3. The second column is filled up as follows: each element of the second column (cipher key) is the sum of digits of the first element of the same row.
4. You has to display the **A** array along the row.
5. Find the cell, which contains the maximum of gold bars, and then display it.

## *Example:*

**Initial data**

N: 5

A[..][1]: 153 15 3435 1215 21

**Output**

A[..][1]: 153 15 3435 1215 21

A[..][2]: 9 6 15 9 3

*A program output should be the following:*

**Enter N (the number of bank cells):** 5

**Enter the number of gold bars of the bank cell 1:** 153

**. . .**

**Enter the number of gold bars of the bank cell 5:** 21

**The number of gold bars/cipher key:**

1. 153 9
2. 15 6
3. 3435 15
4. 1215 9
5. 21 3

**The cell, which contains the maximum of gold bars, is 3.**

*You have to save* ***input data*** *in a separate* ***text file******(for example, using SciTE)*** *as follows:*

5

153 15 3435 1215 21