**SECOND MONTH TASKS FOR HOME a’3p**

## Task

Write an algorithm and a program code corresponding to it, which will have the following requirements:

1. String **T** and symbols **v** and **u** will be inputted from keyboard
2. Program will create another string **Q**, which elements are the symbols from string **T** with the symbols **v** exchanged with symbols **u** and the other way around.
3. The string **Q** will be displayed on screen and written into file **S**.

## Task

Write an algorithm and a program code corresponding to it, which will have the following requirements:

1. The program will read real valued ( parameters **x** and  **(0 < < 1)** from file **S**.
2. Program will create a real valued array **Y**, with elements:
3. Program outputs to screen the number of elements **k** in array **Y** and also all of the elements with their indexes.

## Task

Write an algorithm and a program code corresponding to it, which will have the following requirements:

1. Program inputs positive integers from a file (every number is less than 3889)
2. Program outputs each inputted number and its Roman notation, row by row. For example  
   5 V  
   11 XI  
   1 I  
   100 C  
   …

4.Task

Write an algorithm, which will have the following requirements:

1.Matrix A [n] [6] will be read from keyboard.

2. Find a sum of negative elements for every column below row 5 in matrix A

( one sum per every row), and output them on the screen.

5.Task

Write an algorithm, which will have the following requirements:

**1.Read from keyboard a matrix of integers.**

**2. Find the average (arithmetic mean) value of each row and output it as a sorted vector (array) O with size**

Arithmetic mean is defined as .

Given matrix

Output