

1. 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**.

2. Task

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

1. The program will read real valued ($x, \varepsilon \in \mathbb{R}$) parameters **x** and **ε** ($0 < \varepsilon < 1$) from file **S**.
2. Program will create a real valued array **Y**, with elements:

$$y_1 = \frac{x}{1!}$$

$$y_2 = \frac{x^3}{3!}$$

$$y_3 = \frac{x^5}{5!}$$

...

3. Program outputs to screen the number of elements **k** in array **Y** and also all of the elements with their indexes.

3. 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

...