

ABSTRACT

for coursework, student Yurii Hibeba, group XA-41
on discipline "Computer technologies and programming" on the topic of
"Development of the project for the studying of sorting algorithms"

After analyzing the task, the means necessary for its implementation were determined. In the coursework, five sorting algorithms have been studied: bubble, insertion, selection, counting and quick. Studies were carried out by both linear arrays of custom size (set by the user), and by sorting matrix rows in ascending order of their biggest elements. The development environment Visual Basic 6.0 was used. A project that includes 6 forms was developed. The program allows user to sort square matrixes of any size (up to 500 items) with chosen method. The sorting time and the number of swaps for the selected methods can be researched. The results of sorting and research are displayed in the table and chart respectively.

The performance of each method and the dependence of the efficiency on the length of the array were studied. It is shown that among the studied methods quick and counting are the most effective.

In addition, the possibilities for developing user interface of such controls as TextBox, Label, MSFlexGrid, PictureBox, CommandButton, OptionButton, CheckBox were discovered.