## **ABSTRACT**

for coursework, student Yana Zhezherun, 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, four sorting algorithms have been studied: bubble, selection, insertion and quick. Studies were carried out by sorting odd rows of an arbitrary matrix in ascending order of their elements. The development environment Visual Basic 6.0 was used. A project that includes 26 forms was developed. The program allows user to sort arbitrary matrixes of any size (up to 600 items) with any number of chosen methods. The sorting time and the number of swaps for the selected methods can be researched. The results of sorting are displayed in diagrams (number of swaps and sorting time). The program also has support in the form of a standard menu that allows you record that data in a file, view help on methods of sorting, etc.

The main advantages and disadvantages of each method were investigated. The most rational among the chosen algorithms is quick sort. The advantages and disadvantages of methods were described.

In addition, the possibilities for developing user interface of such controls as as MenuEditor, Image, Frame, MS FlexGrid, ComboBox, SSTab, MS Chart were discovered.