Programming in Assembler – Laboratory

Exercise No.4
Program segments, INVOKE and PROC directives

During the Exercise No.4 students are to debug the sorting program using the CodeView Debugger. Next step is to check the functionality of sorting procedures using different data tables. On the last step other program should be modified to improve its' speed of working. Program is attached to the documentation in `lab4.asm` file.

During the laboratory students are to:
1. Create the project to the `lab4.asm` file with options for debugging and generating listing file.
2. Assemble the project to the `*.exe` file and run the program in debugger using step-by-step mode.
3. Check correctness of sorting procedures.
4. View the source in mixed mode to notice that some of assembled instructions have the 66h or 67h prefixes.
5. Notice what instructions have been generated in place of the INVOKE and PROC directives.
6. Modify the program above to improve its' performance by eliminating the 66h and 67h prefixes.
7. Debug the modified program with CodeView and run the program.

The report should consist of:
- Title page.
- Explanation of 66h and 67h pefixes function.
- Explanation of .586 directive function.
- Description of code generated by INVOKE and PROC directives.
- Modified program listing file.
- Conclusions.