**Lab work 9**

1. (Count characters, words, and lines in a file) Write a program that will count the number of characters, words, and lines in a file. Words are separated by whitespace characters. The file name should be passed as a command-line argument
2. Write a program to create a file named LabWork9.txt if it does not exist. Write 100 integers created randomly into the file using text I/O. Integers are separated by spaces in the file. Read the data back from the file and display the data in increasing order.
3. Write a program that removes all the occurrences of a specified string from a text file. For example, invoking removes the string John from the specified file.
4. Write a program that reads the strings from file SortedStrings. txt and reports whether the strings in the files are stored in increasing order. If the strings are not sorted in the file, display the first two strings that are out of the order.
5. Create a data file with 1,000 lines. Each line in the file consists of a faculty member’s first name, last name, rank, and salary. The faculty member’s first name and last name for the i-th line are FirstName-i and LastName-i. The rank is randomly generated as assistant, associate, and full. The salary is randomly generated as a number with two digits after the decimal point. The salary for an assistant professor should be in the range from 50,000 to 80,000, for associate professor from 60,000 to 110,000, and for full professor from 75,000 to 130,000. Save the file in Salary.txt. Here are some sample data:

FirstName1 LastName1 assistant 60055.95

1. Write a program that prompts the user to enter a file name and displays the occurrences of each letter in the file. Letters are case-insensitive.