User manual

Goal of the program:

Statistics is the menu driven C program to analyze the text and calculate statistics in the text, keep track of words number of occurrence in the text by creating basis statistics database. It can analyze the text from file or from manual input by user and store the made statistics database into an output file.

How to use the program:

Install C compiler to your computer and compile the program code. Then execute the program in terminal by line './stat' (./name of the C file)

After, following menu will appear in the terminal and program will ask for and input. (Fig. 1)

```
Menu:
1. Read from file
2. Enter text manually
3. Display stats
4. Display database
5. Write to file
6. Exit
Enter your choice: []
```

Figure 1 Menu

Enter 1 to read text from a file, then program asks for a name of the file. If compiler asks for a permission to your root folder, give the permission. Enter the name of the text file with its format. For example, text.txt. The file needs to be stored in a root folder of the C file. If everything is correct, success message will appear (Fig. 2).

```
Enter your choice: 1
Enter the name of the file: text.txt
File read successfully!
```

Figure 2 Reading from file

If filename is not correct, error message will appear (Fig. 3). In this case you can repeat the previous step again.

```
Enter your choice: 1
Enter the name of the file: input.txt
Error opening file!
```

Figure 3 Error during opening the file

To read another multiple files, previous steps are repeated for other files one by one by one. After, programs returns to menu again.

To enter the text manually choose 2 in the menu, program asks for input text and at the end of your text type "exit7" to stop. (Fig.43). Program returns to menu.

```
Enter your choice: 2
Enter text (type 'exit7' to stop):
My name is Rinat I am BME student
exit7
```

Figure 4 Entering text manually

To know the total number of words and number of unique words choose option 3 in menu-type 4 in menu.

Figure 5 Displayed statistics of text

To see the database of words in the text, chose option 4 in the menu. Program will show list of words and number of their occurrence in the text next to it.

Figure 6 Database of words

To write the data of database into a file chose option 5. Program asks for a name of the output file. Program will write the data into this file, enter the name of the text file with its format. For example – "output.txt". If everything is correct, program will show a success message. If there is no already existing file with this name, it will created new one.

Figure 7 Writing results into a file

If you finished, choose option 6 in menu.
To do other analysis, also choose 6, stop the program and execute it again.

Where are the files a stored
As mentioned before, to analyze the text file, text file must be stored in the root folder of the C program.
For output file, results also will be stored in the root folder in created text file by given name. To save data into an already created file, store this required output file into a foot folder of the C program.

Figure 8 Root folder

For ensure you correct work, pay attention to storing the files into a root folder and inputting the name of the files correctly. Good luck!