**Baku Higher Oil School**

**Process Automation Engineering Department**

**Programming in C**

**Laboratory 9 – File Processing**

**P.S** Add comment for each task; submit the file in LMS before the deadline.

1. Create test.txt file and add the following text:

“Computer science is the study of algorithmic processes and computational machines.”

* Display the content of file
* Count the number of characters in a file
* Ask user to enter text to file and display the content of file

1. **Self-study: search for the functions** *fseek() and ftell()*

Open file lab.txt for reading that contain text:

“Robotics involves design, construction, operation, and use of robots.”

* Set file pointer to 17th byte/character in the file and write “computer”. *Hint: use fseek()*
* Print position of file pointer. *Hint: use ftell()*
* Find backward 30 bytes from end of file and write “industry”
* Display content of file.

1. Write a program that initializes the file *JustCreated.txt* with records in tabular formats illustrated in the figure below:

User should enter the number of the records and the data itself as ID and NAME of the students.

* Write all data to the txt file:

Graphical user interface, text, application, table

Description automatically generated

1. Write a program to check existence of the word in *JustCreated.txt* file.

|  |  |
| --- | --- |
| string inside txt file:  Student ID Student Name 222 naz 21212 nazelle 32321 nazka | existed word is:  naz |

1. A data file contains registration information for six courses – CS20A, CS21A, CS29A, CS30A, CS35A, and CS36A. Each line of data consists of a seven-digit student registration number followed by six (ordered) values, each of which is 0 or 1. A value of 1 indicates that the student is registered for the corresponding course; 0 means the student is not. Thus, 1 0 1 0 1 1 means that the student is registered for CS20A, CS29A, CS35A, and CS36A, but not for CS21A and CS30A.

You may assume that there are no more than 100 students and a registration number 0 ends the data.

Write a program to read the data and produce a class list for each course. Each list

consists of the registration numbers of those students taking the course.

1. Program should compare the two similar files and print the indexes of different characters.
2. Program should find the given word in files and replace it with new one.