

2nd Laboratory Session (C Language Programming)

The Assignment

Rewrite the program from the first session so that complex numbers are in form of structures containing two doubles representing real and imaginary part. Also, implement each operation with complex numbers as a separate function taking the necessary operands as parameters and returning a result of the operation.

Let the final program display a menu that offers various items like entering complex numbers and executing operations like summation and multiplication. Do not forget to implement the option to exit the program.

An example of complex variable declaration and function invocations

```
struct complex A, B, C, D, E;  
//...  
A = add(B, C);  
D = conjugate(E);
```

Auxiliary Questions

- How do you declare a structure?
- How do you define a function?
- How does the `switch` statement work?
- Basically, the program can be implemented as a constant repetition of three tasks: printing a menu to the screen, reading the user input, and the execution of the selected task. How can you achieve that the program is executed until the user selects output from the program?