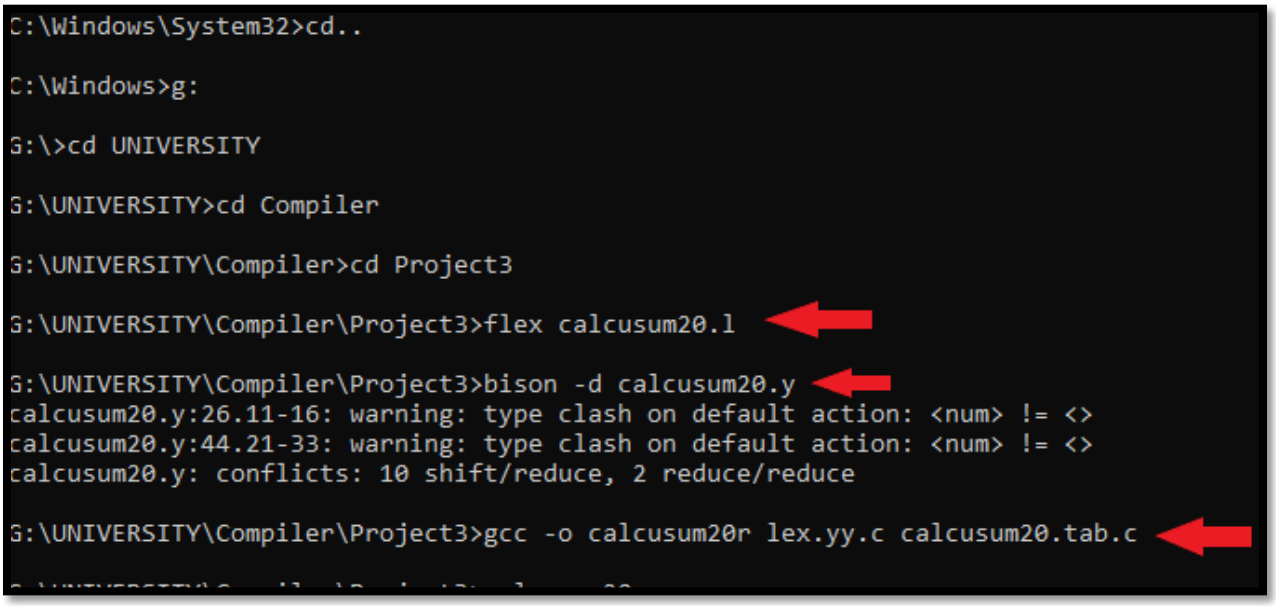
Short Description about the Compiler Construction project:

It uses the concept of Lex-Yacc using Flex-Bison to parse basic C-language like methods and operators. YACC has no idea what 'input streams' are, it needs preprocessed tokens. While we can write our own Tokenizer, it is entirely handled by Lex. The program is fully self-coded starting from the example code provided in the resources of the course. This project requires installation of recent versions of Flex and Bison on Windows or Linux system.

To run the project:

- Open terminal in the project file directory
- Enter the following commands



- Run “calcusum20r” file
- You can also write the input in “run.txt” file and use the command “calcusum20r<run.txt” (in Windows) to run the program and give input

It can run the following operators on integers and variables:

+, -, *, /, %, ++, --, ==, &&, ||,), (, +=, -=, *=, /=, %=

It also supports variable assignment and C-language like methods

****The program will not print without return statement***

****The code will give syntax error if semi-colon is not given in required statements**

These are some of the example-code run:

return 5;

Output: 5

return 5+5;

Output: 10

return 5++;

Output: 6

void foo() {}

Output:

int foo() {return 6;}

Output: 6

int foo() { if (5==5) {return 5;}}

Output: 5

reached if-block [this is just a confirmation message]

int foo() { if (8%2==0) {return 1;}}

Output: 1

reached if-block

int foo() { if (8%2==0) {return 1;} else{return 2;}}

Output: 1

reached ifel-second-block [this is just a confirmation message]

int foo() {int a=5;}

Output: assigning… [this is just a confirmation message]

int foo() {int a=5; return a;}

Output: assigning… [this is just a confirmation message]

searching ID… [this is just a confirmation message]

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int foo(){int c=4; int d=8; return d/c;}

Output: assigning… [this is just a confirmation message]

assigning… [this is just a confirmation message]

searching ID… [this is just a confirmation message]

searching ID… [this is just a confirmation message]

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