

Introduction to Programming Languages CECS130

Lab #3.

Programming assignment (100 pts): Write a computer program in C which will simulate a calculator. Your calculator needs to support the five basic operations (addition, subtraction, multiplication, division and modulus) plus primality testing (natural number is prime if it has no non-trivial divisors). Example of the output follows:

Calculator Menu:

- (1) Addition
- (2) Subtraction
- (3) Multiplication
- (4) Division
- (5) Modulus (integers only)
- (6) Test if prime (integers only)
- (7) Exit

Please choose an operation: 2

Enter the first number: 18

Enter the second number: 20

18 - 20 = -2

Calculator Menu:

- (1) Addition
- (2) Subtraction
- (3) Multiplication
- (4) Division
- (5) Modulus (integers only)
- (6) Test if prime (integers only)
- (7) Exit

Please choose an operation: 6

Enter the number to be tested: 22

Not prime: 2 x 11 = 22

Calculator Menu:

- (1) Addition
- (2) Subtraction
- (3) Multiplication
- (4) Division
- (5) Modulus (integers only)
- (6) Test if prime (integers only)
- (7) Exit

Please choose an operation: 7

Good Bye!

You program **MUST** be bug-free, well commented (Including author information, program description, lab section, date, etc.)