

- Human readable computation protocol
- Develop a - human readable - protocol that addresses a simple problem, which is to compute basic algebraic operations. These operations are **Addition, Subtraction, Multiplication, Division, Raising to a whole Number Power** and **taking Roots**. All operators as well as results need to be within the realm of the real numbers. That said, note that roots of negative numbers are not defined. Also note that division by zero is not allowed and thus will be rejected. Your protocol needs to accommodate both exceptional situations.
- A **word memo** that provides a detailed description of your protocol. Make sure to cover the following topics:
 - How do you communicate the different operations.
 - How do you represent numbers, how are they delimited, and how are they separated from the operations/operators.
 - How do you communicate exceptional situations.
 - How do you communicate shutting down a session of a client with the server.

Our protocol does basic operations such as addition, subtraction, division, multiplication, raising a whole number to a power, and taking the square root of a number. Firstly we ask our user if they would like to continue with a math operation or quit. We ask the user for the first number and then ask if they would like this number to be negative. We then ask the user which operation they would like to do with this prompt: `Input operator (+, -, *, /, ^, sqrt):`. We repeat our questions again for the second number. Our numbers are represented as integers and casted as doubles in our math method. We delimited our numbers and operators in an enum and retrieved our operators by assigning them as flags. We retrieve them one at a time from the client's input. We let the user know if they are going to perform an operation that results in an error such as dividing by zero or taking the square root of a negative number, ask them to try again, and shut down the connection. Lastly when the operation is finished we communicate with the user and let them know that the session is ending by printing "Closing session of client" to the terminal.