Exercises – Matrices

Try doing these Matrix Multiplications by hand.

Refer to the lecture slides if you are unsure about the process:

Transpose these Matrices:

Multiply this matrix and vector:

Implement column-major Matrix classes in code for the following dimensions:

Matrix2 - 2x2

Matrix3 - 3x3

You will need to implement the following methods:

* A default constructor and a constructor that can set the matrix based on a collection of floats.
* Multiplication operator \* for Matrix x Matrix and Matrix x Vector (of matching dimensions)
* A method for Transposing the matrix. You may want to implement a method for transposing and a method for returning a transposed version of the matrix.