Following are the few very basic coding exercises that you can start with before we move to much more complex program. You are expected to implement the following in the lab classes scheduled this week.

1. Multiplication of two given matrixes
2. Sum of the diagonal elements of a given Matrix
3. Element-wise Matrix Multiplication (Hadamard Product)
4. Outer product of two given vectors
5. Determinant of a given square matrix

**Additional set of exercises:**

1. Write a program to find the maximum and minimum from a given vector. Your implementation should be computationally efficient.
2. Can we think of a program to find all linearly independent vectors from a set of N, d-dimensional vectors?