Problem Set 1

1. Implement two functions multiply(int, int) and multiply(int, int, int) to return a multiplication of the input argument values.
2. Implement multiply(array2D, array2D) to implement matrix multiplication.
3. Create a class Matrix in which implement all the above versions of multiply() using operator *.
4. Derive another class DiagonalMatrix from Matrix and implement multiply(DiagonalMatrix) which multiplies *this* matrix with the argument matrix.
5. Implement the last multiply() using operator *.
6. Print the matrix M using cout << M.