**CM0669 Machine Learning and Computer Vision**

**Homework 1:** Matlab programming, matrix operations, implementation of mathematical equations.

You are provided with a data file ‘data.mat’ which contains two matrices *A* and *B* of the same size. Denote by M×N (M rows, N columns) the size of these matrices. You are required to write Matlab programmes that implement the following equations and compute *output*

**A- Matrix operations**

1-

2-

3-

**B- Vector operations**

Convert each of the previous matrices into a column vector using the following syntax:

A=A(:); B=B(:);

Denote by *L* the length of each vector. Write Matlab programmes that implement the following equations and compute *output*

1-

2-

3-