7. Create an * .m file called ARRAY_1.m and write the following:

a. Write the command to clean up the Workspace and Command windows of MATLAB, and then display the current date and time in the Command window.

b. Create array A. Write in it the commands to generate the following arrays: A1 (1-by-10) with the operator :, A2 (10-by-1) with linspace(), A3 (2-by-10) with eye().

c. Create array B. Write in it the commands to create the following arrays: B1 (5-by-6) with randi() elements ranging between [-1....1], B2 (5-by-6) with rand(), and B3 (5-by-10) with randn().

d. Create array B. Write in it the commands to create the following arrays: B1 (5-by-6) with randi() elements ranging between [-1....1], B2 (5-by-6) with rand(), and B3 (5-by-10) with randn().

e. Write in it the commands performing all possible (arithmetic array) operations (+, -, *, /, .*, ./, ^, .^) with A1, A2, and A3 (at least three operations) and call these new matrices: A1new1, A1new2, A1new3, A2new1, A2new2, A2new3, A3new1, A3new2, A3new3. Hints: use transpose() and rot90() while performing arithmetic array operations

f. Write in it the commands performing all possible (arithmetic array) operations (+, -, *, /, .*, ./, ^, .^, sum, mean) with B1, B2 and B3 (at least three operations) and call new matrices: B1new1, B1new2, B1new3, B2new1, B2new2, B2new3, B3new1, B3new2, B3new3. Hint: use fliplr() and transpose() while performing arithmetic array operations

g. Create AB1, AB2, and AB3 matrices from A1, A2, A3, and B1, B2, and B3. Also, use part of any A1, A2, A3 and B1, B2, B3 arrays. Note that every AB1, AB2, AB3, ABC4, ABC5 should contain some elements from arrays A and B. Hint: use flipud() and repmat() while creating the arrays AB1, AB2, and AB3

h. Create ABC1, ABC2, and ABC3 matrices by combining/concatenating the previously created arrays: A1, A2, A3 and B1, B2, B3 and C1, C2, C3. You should also use part of any A1, A2, A3 and B1, B2, B3 and C1, C2, C3 arrays. Note that every ABC1, ABC2, ABC3 should contain some elements from the A, B and C matrices from Parts 1, 2, and 3.