

LAB 6

CS 1109

16th July, 2013

1. Create a script file '*scripts.m*'. Type the following statements in the file one by one and check the output. For e.g. the script file contains statement (i), then from the command prompt run the script as

```
>> scripts
i.   A = [1, 2, 3
          4, 5, 6
          7, 8, 9]
ii.  B = [10, 9, 8; 7, 6, 5; 4, 3, 2]
iii. C = A + B
iv.  C = C - 10
v.   [rows, columns] = size(C);
vi.  for i = 1:rows

      for j = 1:columns

          if i ~= j
              C(i, j) = 0;
          end

      end

end

disp(C);
```

2. Add code to '*scripts.m*' to change matrix C to –

```
2   3   4
3   4   5
4   5   6
```

, where each matrix element is the sum of the row number and the column number.

3. Challenge

Open the file '*merge.m*'. Complete the function *merge* to merge two arrays. The function should have two input arguments as double arrays. The function should return a single array with unique elements. For e.g.

```
P1 = [1, 2, 3, 4];
P2 = [3, 4, 5, 6];
F = merge(P1, P2)
```

F should be [1, 2, 3, 4, 5, 6]