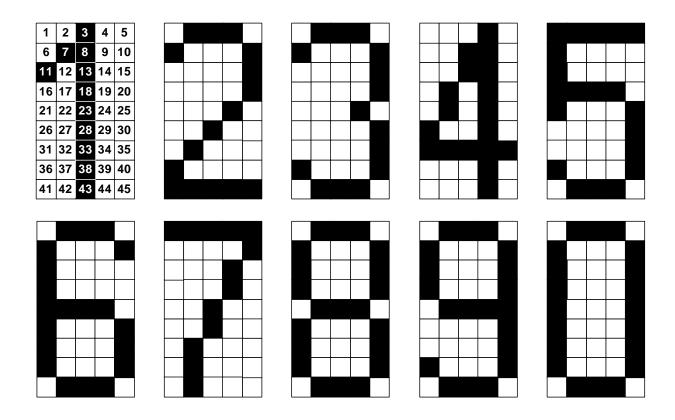
## Mini Project 3

Deadline: Tue., March 17, 11:59 PM

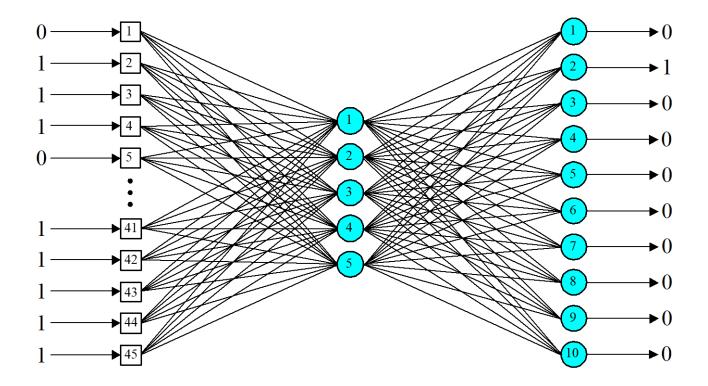
Instructor: Dr. Shahryar Rahnamayan, PEng, SMIEEE

**Printed Digits Recognition Using ANN** 

Problem: The 5\*9 bitmaps for printed digits are given as the follows:



Design and train a similar to the following ANN to recognize them:



In the report, you need to explain all details of your design and trained ANN. Also you need to plot Sum-Squared-Error Vs. Epochs for your training, you need to test for all 10 digits and show the correct results which your designed ANN generates. Could you come up with a more compact ANN (i.e., ANN with a lower number of neurons) which still has a high level of accuracy?