

Design a two-layer Perceptron neural network with two nodes in the first layer and one node in the second layer which will correctly classify the two classes (circles and stars) as shown below. Assume the activation (transfer) function for all the nodes are hard-limit with the output of **0 (star)** and **1 (Circle)**.

Show the weight matrices and biases for both layers.

**Biases** should be included in the weight matrices **in the first column**.

