Classification exercise

Construct a neural network for solving the Exclusive-OR problem, showing the values of all the weights and biases of the network. You may assume that a threshold function is used for all the neurons.

The truth table of (x_1 XOR x_2):

x_1	x_2	x_1 XOR x_2
0	0	-1
0	1	1
1	0	1
1	1	-1

Hint: The solution of the XOR problem requires two hidden neurons.

h_1: sign ($x_1 + x_2 - 0.5$)

h_2: sign ($x_1 + x_2 - 1.5$)