Can you do it yourself?

What is the output \( O \) from the network?
What are the \( \Delta w_{ij} \) and \( \Delta v_{jk} \) values if the target value is 0 and \( \varepsilon = 0.5 \)?

\[
\begin{align*}
\Delta w_j &= -\varepsilon \cdot \frac{\partial E}{\partial w_j}; \quad \Delta v_{jk} = -\varepsilon \cdot \frac{\partial E}{\partial v_{jk}} \\
\frac{\partial E}{\partial w_j} &= (O - t) \cdot g'(o) \cdot H_j \\
\frac{\partial E}{\partial v_{jk}} &= g'(h_j) \cdot I_k \cdot (O - t) \cdot g'(o) \cdot w_j \\
g'(x) &= (1 - g(x)) \cdot g(x) \\
O &= g(o)
\end{align*}
\]
Can you do it your self (ε=0.5).
Has the error decreased?

Before

\[ I_1 = 1 \]
\[ I_2 = 1 \]
\[ v_{11} = 1 \]
\[ v_{12} = 1 \]
\[ v_{21} = -1 \]
\[ v_{22} = 1 \]
\[ w_1 = -1 \]
\[ w_2 = 1 \]
\[ h_1 = H_1 \]
\[ h_2 = H_2 \]
\[ o = O = 1 \]

Δ\(w_1\) = ??
Δ\(w_2\) = ??

After

\[ I_1 = 1 \]
\[ I_2 = 1 \]
\[ v_{11} = \] (Note: Value is missing)
\[ v_{12} = \] (Note: Value is missing)
\[ v_{21} = \] (Note: Value is missing)
\[ v_{22} = \] (Note: Value is missing)
\[ w_1 = \] (Note: Value is missing)
\[ w_2 = \] (Note: Value is missing)
\[ h_1 = H_1 \]
\[ h_2 = H_2 \]
\[ o = O = \] (Note: Value is missing)

Δ\(v_{11}\) = ??
Δ\(v_{12}\) = ??
Δ\(v_{21}\) = ??
Δ\(v_{22}\) = ??