

```
N = size(x1, 2);
s = xTask2;
patterns = [x1; x2; x3; x4; x5];
patternLikeness = zeros(1,size(patterns, 1));

W = 1/N * (patterns') * patterns;
W(1:1+size(W,1):end) = 0; % Sets the diagonal weights to zero

notFound = true;

while notFound
    for m = 1:N
        b = W(m,:) * s';
        if b == 0
            sUpdated = 1;
        else
            sUpdated = sign(b);
        end
        disp(s(m) == sUpdated)
        s(m) = sUpdated;
    end
    for p = 1:size(patterns)
        numNotEqualBits = sum(s ~= patterns(p,:));
        patternLikeness(p) = numNotEqualBits;
        if numNotEqualBits == 0 || numNotEqualBits == N
            notFound = false;
            disp("Converged to pattern: " + p)
        end
    end
end
end
```