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```
function [p, X, Z, y] = solve_sdp2(W)
% Solve the SDP relaxation of the two-way partitioning problem and
% return
% the optimal value p, solution X, and dual variables Z, y.
%
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n = size(W, 1); % Get the dimension.

cvx_begin sdp
variable X(n,n) symmetric
dual variables Z y
minimize trace(W*X)
X >= 0 : Z;          % Z is a matrix and a dual variable.
diag(X) == 1 : y;    % y is a vector and the dual variable here.
cvx_end

p = cvx_optval;
end
```

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