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function [prox] = proximal_l1_norm(beta, lambda, t)
%PROXIMAL_L1_NORM Returns the proximal of LASSO L1 penalty
%  beta_0 is unchanged. beta(2:end) is soft threshold with parameter
%  lambda*t.
p = length(beta) - 1;
prox = zeros(p+1,1);
threshold = lambda * t;
prox(beta>threshold) = beta(beta>threshold) - threshold;
prox(beta<=-threshold) = beta(beta<=-threshold) + threshold;
prox(1) = beta(1);
end
```

*Not enough input arguments.*

*Error in proximal\_l1\_norm (line 5)*  
*p = length(beta) - 1;*

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