Calculate Mass of Spar

Input - X - Design Variable Output - Spar Mass, gradient of objective

```
function [Spar_mass,g] = obj_func(X)
Nnodes = (length(X)/2); % No. of nodes
L = 7.5; %m Semi-Length of spar
rho = 1600; % kg/m^3 - density

% Calculate Volume
Volume = Calc_vol(X,L,Nnodes-1);

% Compute Mass
Spar_mass = rho*Volume;

% Compute gradient
g = Calc_objGrad(X);
end
```

Published with MATLAB® R2021a