```
function handles = averageAnnualLoss(handles)
% Combine all individual losses (already weighted based on P collapse,
% demo, repair) into loss given IM
handles.L IM = handles.ncLoss IM + handles.collapseLoss IM + handles.demoLoss IM;
deriv = handles.hazardDerivative(2,:);
% Calculate total AAL, and AAL caused by each of the components
handles.AAL = trapz(handles.hazardCurve(1,:), deriv.*handles.L IM);
AAL deag repair = trapz(handles.hazardCurve(1,:), deriv.*handles.ncLoss IM);
AAL deag collapse = trapz(handles.hazardCurve(1,:), deriv.*handles.collapseLoss IM);
AAL deag demo = trapz(handles.hazardCurve(1,:), deriv.*handles.demoLoss IM);
% Find the ratio
lossRatioRepair = AAL deag repair/handles.AAL;
lossRatioCollapse = AAL deag collapse/handles.AAL;
lossRatioDemo = AAL deag demo/handles.AAL;
% Total ratio
lossRatio = handles.AAL/handles.collapseCost;
% Save to handles for later use, perhaps a display or a graph
handles.ratio.totalLoss = lossRatio;
handles.ratio.Repair = lossRatioRepair;
handles.ratio.Demo = lossRatioDemo;
handles.ratio.Collapse = lossRatioCollapse;
% Display the total AAL
disp('Average Annual Loss:')
disp(handles.AAL)
end
```