```matlab
function [len,dims] = lengthofline(hline)
%LENGTHOFLINE Calculates the length of a line object
%   LEN = LENGTHOFLINE(HLINE) takes the handle to a line object as the
%   input, and returns its length.  The accuracy of the result is
 directly
%   dependent on the number of distinct points used to describe the
 line.
%
%   [LEN,DIM] = LENGTHOFLINE(HLINE) additionally tells whether the
 line is
%   2D or 3D by returning either a numeric 2 or 3 in DIM.  A line in a
%   plane parallel to a coordinate plane is considered 2D.
%
%   If HLINE is a matrix of line handles, LEN and DIM will be matrices
 of results.
%
%   Example:
%       figure; h2 = plot3(1:10,rand(1,10),rand(10,5));
%       hold on; h1 = plot(1:10,rand(10,5));
%       [len,dim] = lengthofline([h1 h2])



% Find input indices that are not line objects
nothandle = ~ishandle(hline);
for nh = 1:prod(size(hline))
    notline(nh) = ~ishandle(hline(nh)) ||
 ~strcmp('line',lower(get(hline(nh),'type')));
end

len = zeros(size(hline));
for nl = 1:prod(size(hline))
    % If it's a line, get the data and compute the length
    if ~notline(nl)
        flds = get(hline(nl));
        fdata = {'XData','YData','ZData'};
        for nd = 1:length(fdata)
            data{nd} = getfield(flds,fdata{nd});
        end
        % If there's no 3rd dimension, or all the data in one
 dimension is
        % unique, then consider it to be a 2D line.
        if isempty(data{3}) | ...
                (length(unique(data{1}(:)))==1 | ...
                 length(unique(data{2}(:)))==1 | ...
                 length(unique(data{3}(:)))==1)
            data{3} = zeros(size(data{1}));
            dim(nl) = 2;
        else
            dim(nl) = 3;
        end
        % Do the actual computation
```

```matlab
        temp = diff([data{1}(:) data{2}(:) data{3}(;)]);
        len(nl) = sum([sqrt(dot(temp',temp'))])
    end
end

% If some indices are not lines, fill the results with NaNs.
if any(notline(:))
    warning('lengthofline:FillWithNaNs', ...
        '\n%s of non-line objects are being filled with %s.', ...
        'Lengths','NaNs','Dimensions','NaNs')
    len(notline) = NaN;
    dim(notline) = NaN;
end

if nargout > 1
    dims = dim;
end
```

Error using dbstatus
Error: File: C:\Users\resjoehr\MATLAB Drive\Customers\IntroWorkshop
\3_Scripts\CodeAnalyzer_lengthofline.m Line: 47 Column: 52
Invalid expression. When calling a function or indexing a variable,
use parentheses. Otherwise, check for mismatched delimiters.