```
function [R] = calc_R(axis,angle)
%calc_R: Calculate a rotation matrix (dynamics backwards from
 robotics)
%   axis = string: 'x', 'y', or 'z' - which axis you are rotating
 about
%   angle = angle you are rotating in degrees

if axis == 'x'
    R = [...
        1           0               0;...
        0           cosd(angle)     sind(angle);...
        0           -sind(angle)    cosd(angle)]; %from X'Y'Z' to
 X"Y"Z"
end

if axis == 'y'
    R = [...
        cosd(angle)     0   -sind(angle);...
        0               1   0;...
        sind(angle)     0   cosd(angle)];
end

if axis == 'z'
    R = [...
        cosd(angle)     sind(angle)     0;...
        -sind(angle)    cosd(angle)     0;...
        0               0               1]; %from XYZ to X'Y'Z'
end

end
```

```
Not enough input arguments.

Error in calc_R (line 6)
if axis == 'x'
```

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