```
function [Cx,Cy,Cz] = joshAxisRotation(opt)
arguments
        opt {mustBeMember(opt,{'degree','radian'})} = 'radian'
end


if strcmp(opt,'degree')
Cx = @(theta)...
    [[1 0 0];...
    [0 cosd(theta) sind(theta)];...
    [0 -sind(theta) cosd(theta)]];

Cy = @(theta)...
    [[cosd(theta) 0 -sind(theta)];...
    [ 0 1 0];...
    [sind(theta) 0 cosd(theta)]];

Cz = @(theta)...
    [[cosd(theta) sind(theta) 0];...
    [-sind(theta) cosd(theta) 0];...
    [0 0 1]];
else
Cx = @(theta)...
    [[1 0 0];...
    [0 cos(theta) sin(theta)];...
    [0 -sin(theta) cos(theta)]];

Cy = @(theta)...
    [[cos(theta) 0 -sin(theta)];...
    [ 0 1 0];...
    [sin(theta) 0 cos(theta)]];

Cz = @(theta)...
    [[cos(theta) sin(theta) 0];...
    [-sin(theta) cos(theta) 0];...
    [0 0 1]];
end
end
```

Published with MATLAB® R2022a