4/9/2019 RPY_to_Rot

```
% A function that converts RPY angles to Rotation matrix
function R = RPY_to_Rot(RPY_angles)
% assign the RPY angles for convenience
% Roll angle
gamma = RPY_angles(1);
% Pitch angle
beta = RPY angles(2);
% Yaw angle
alpha = RPY_angles(3);
% Compute each elementary rotation matrices for RPY.
% Roll Matrix
R1 = [1,0,0;0,\cos(gamma),-\sin(gamma);0,\sin(gamma),\cos(gamma)];
% Pitch Matrix
R2 = [\cos(beta), 0, \sin(beta); 0, 1, 0; -\sin(beta), 0, \cos(beta)];
% Yaw Matrix
R3 = [\cos(alpha), -\sin(alpha), 0; \sin(alpha), \cos(alpha), 0; 0, 0, 1];
% Total Rotation Matrix
R = R3*R2*R1;
end
```

```
Not enough input arguments.
Error in RPY_to_Rot (line 5)
gamma = RPY_angles(1);
```

Published with MATLAB® R2018b

4/9/2019 RPY_to_Rot