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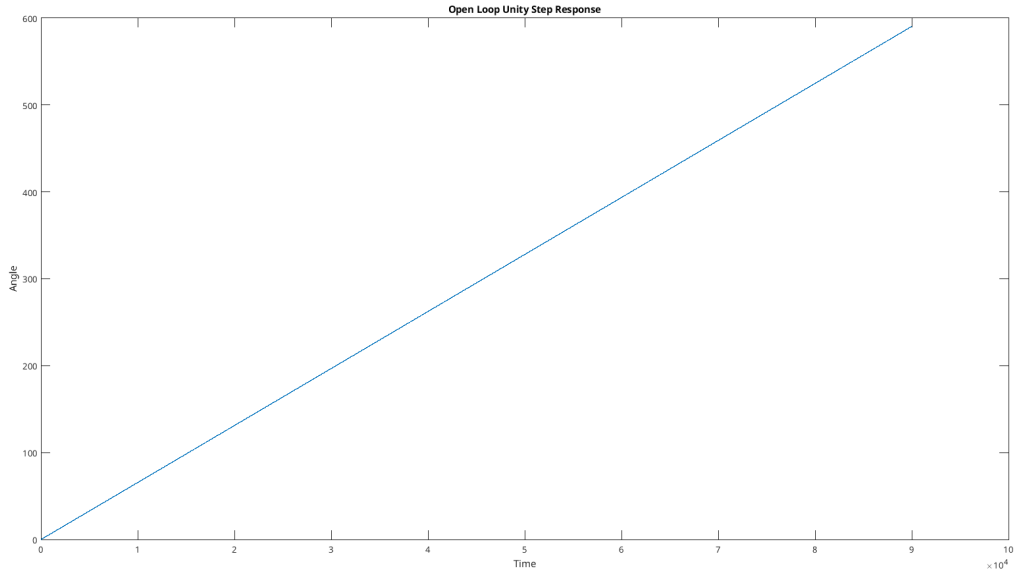
Open Loop Transfer Function

```
s=zpk('s'); % Set 's' = laplace variable
Motor=tf(2.083,[1, 1.71]); % Find the transfer function for motor block
G=(Motor*0.1)/s; % Finds G, theta/Ea
```

Open Loop Unity Step Response

```
OLoopUnitStep=step(G); % Finds the Open Loop Unity Step Response
plot(OLoopUnitStep)
xlabel('Time');
ylabel('Angle');
title('Open Loop Unity Step Response')
```



Unit Step Response

```
syms 's'
G=0.2083/(s+1.71);
ilaplace(G)
```

```
ans =

(2083*exp(-(171*t)/100))/10000
```

Verifying the original transfer function

```
syms 't'
laplace(0.2083*exp(-1.71*t))*(0.1/s);
```

Published with MATLAB® R2023b