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Tugas minggu 3

Link Github: <https://github.com/dilonpetra/Sistem-Kendali.git>

- mendeklarasikan variable dalam integral effect control yaitu T, sys, Kp, Ki, s.

```
s = tf('s')
T = 1;

num = 1;
den = [T T/16 1];

Kp = 1;
Ti = 1;
Ki = Kp/Ti;

sys = tf(num, den);
```

- mendeklarasikan variable dalam integral effect control yaitu T, sys, Kp, Ki, s.

```
sys_c = tf([Kp, Ki], [1, 0]);
```

- menghitung fungsi = feedback(sys\*sys\_c,1)

```
fungsi = feedback (sys*sys_c, 1
```

- menghitung respon impulse, step dan ram

```
figure
subplot(311), step(fungsi*s); % Impulse reponse
stepinfo(fungsi*s)
subplot(312), step(fungsi); % Step Response
stepinfo(fungsi)
subplot(313), step(fungsi / s); % Ramp response
stepinfo(fungsi/s)
```

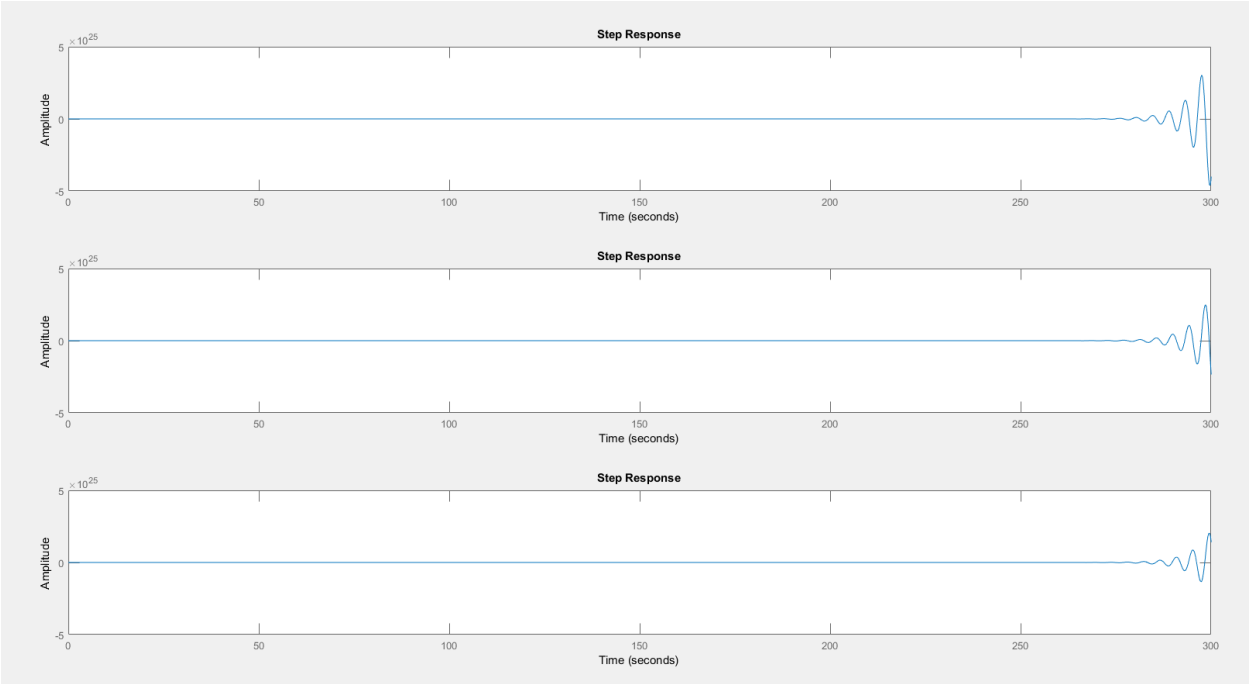
mendeklarasikan variable dalam integral effect control yaitu T, sys, Kp, Ki, s.

menghitung fungsi gain =  $(K_p + K_i)/s$

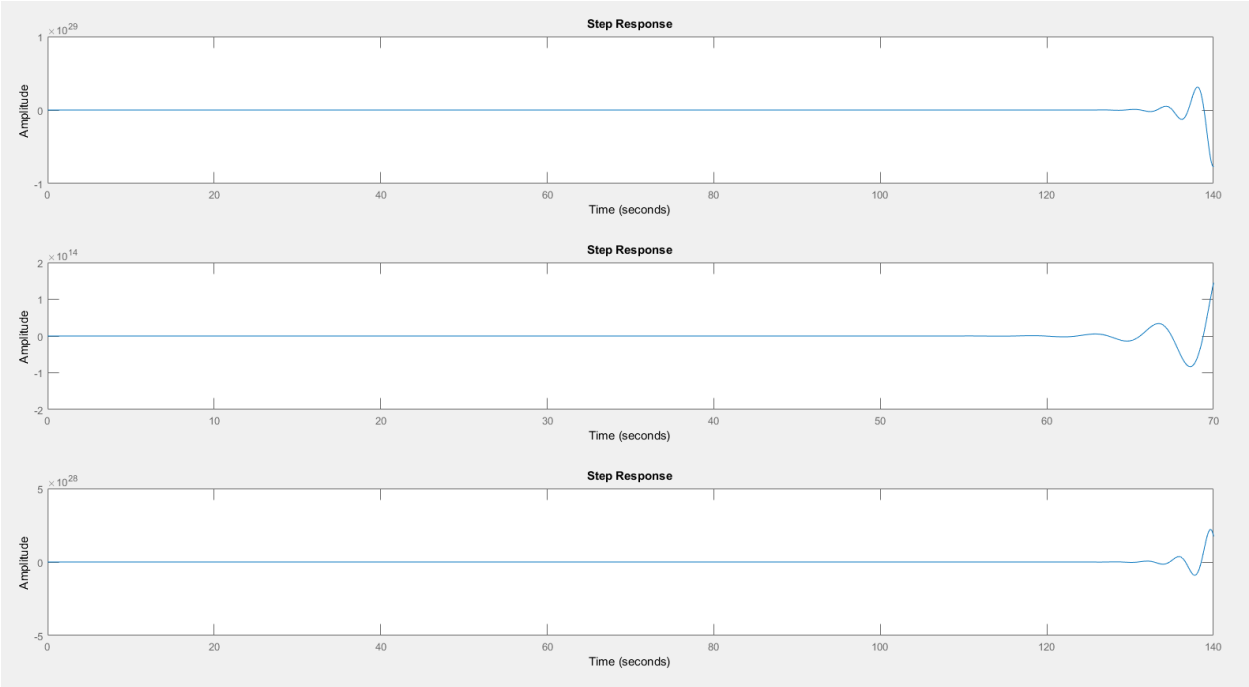
menghitung fungsi = feedback(sys\*sys\_c,1)

menghitung respon impulse, step dan ram

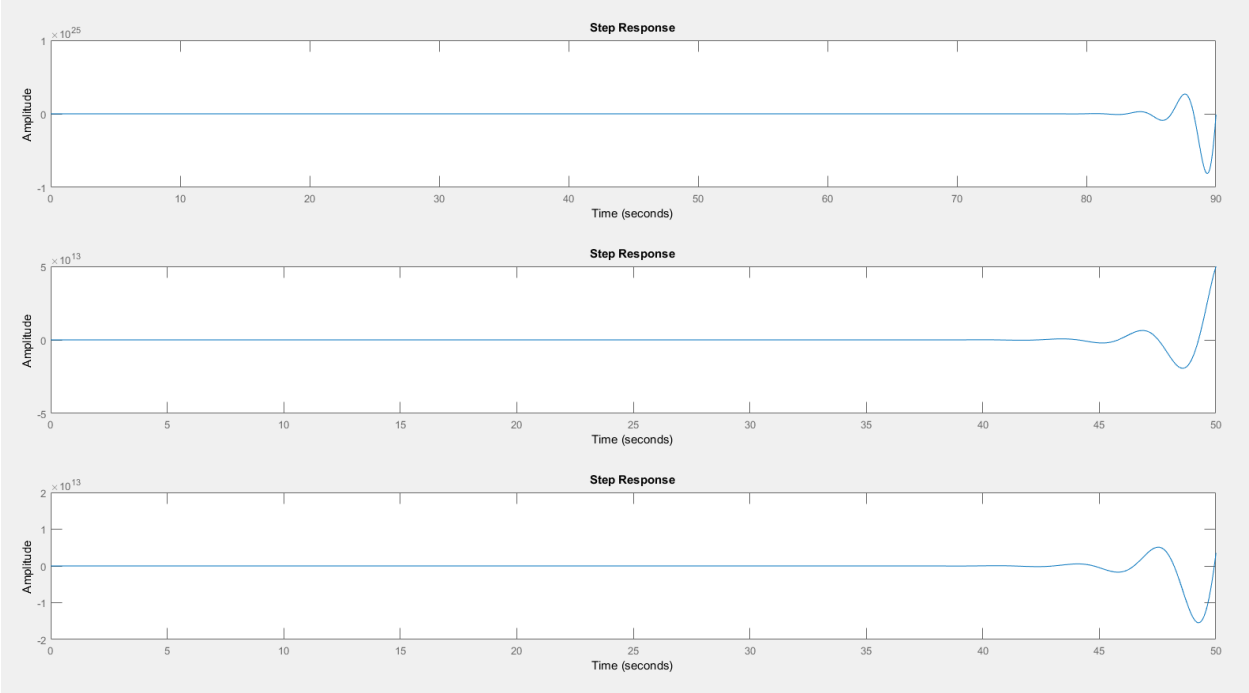
Ki =1



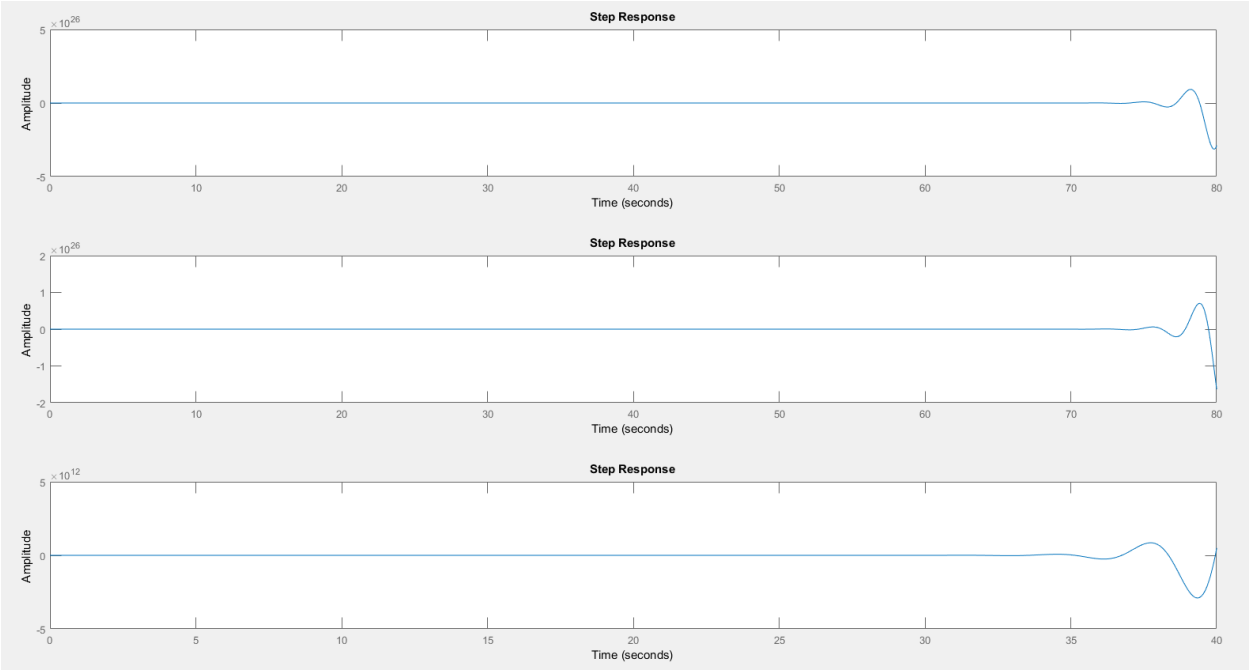
Ki = 3



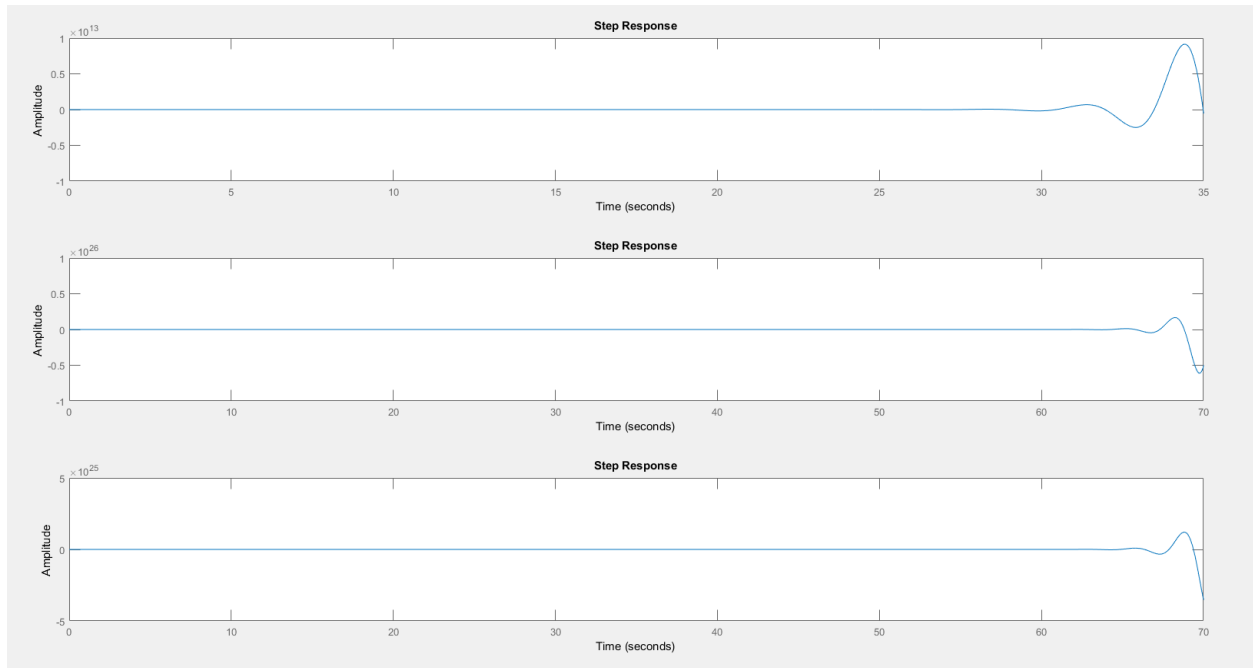
Ki =5



Ki = 7



Ki = 9



struct with fields:

```
RiseTime: NaN
SettlingTime: NaN
SettlingMin: NaN
SettlingMax: NaN
Overshoot: NaN
Undershoot: NaN
Peak: Inf
PeakTime: Inf
```