

---

```

sys_open = tf([1],[1 2 1 0]);
sys_closed = feedback(sys_open,1,-1)
figure(1)
margin(sys_open)
[Gm,Pm,Wcg,Wcp] = margin(sys_open)
figure(2)
step(sys_closed)
S = stepinfo(sys_closed)

```

```

sys_closed =

```

$$\frac{1}{s^3 + 2s^2 + s + 1}$$

Continuous-time transfer function.

```

Gm =

```

2

```

Pm =

```

21.3877

```

Wcg =

```

1

```

Wcp =

```

0.6823

```

S =

```

struct with fields:

```

    RiseTime: 1.7271
    SettlingTime: 30.9388
    SettlingMin: 0.6759
    SettlingMax: 1.5435
    Overshoot: 54.3517
    Undershoot: 0
    Peak: 1.5435
    PeakTime: 4.7761

```

