

```

R = 20;
L = 10;
C = 1;

den = [R*L*C, L, R];

G11 = tf([R*C, 1],den);
G12 = tf([1],den);
G21 = G12;
G22 = tf([L*C, 0, 1],den);

sys = [G11, G12; G21, G22]

sys.InputName = ['V_1', 'V_2'];
sys.OutputName = ['I_1', 'I_2'];

bode(sys)
grid on

```

```

sys =

```

From input 1 to output...

$$1: \frac{20s + 1}{200s^2 + 10s + 20}$$

$$2: \frac{1}{200s^2 + 10s + 20}$$

From input 2 to output...

$$1: \frac{1}{200s^2 + 10s + 20}$$

$$2: \frac{10s^2 + 1}{200s^2 + 10s + 20}$$

Continuous-time transfer function.

