

```
clear all;  
m_1 = 0.52;  
k = 142;  
d = 2;  
b = k;  
  
a0 = b/m_1;  
b0 = k/m_1;  
b1 = d/m_1;  
  
G = tf([a0], [1 b1 b0]);  
bode(G)  
grid on
```