

Code:-

```
1 k1 = 10; k4 = k1; k2 = 30; k3 = k2;
2 x1 = 0.05; x2 = 0.04; x3 = 0.03;
3 m = 1;
4 k = [(k1+k2)/m -k2/m 0; -k2/m (k2+k3)/m -k3/m; 0 -k3/m (k3+k4)/m];
5 x= [x1; x2; x3];
6 a = -k*x;
7 disp("The acceleration of mass are:");
8 disp(a);
```

Result:-

>> LAB3

The acceleration of mass are:

-0.8000

0

0