

```
1 function b = b_pend(in1,in2,in3)
2 %B_PEND
3 %     B = B_PEND(IN1,IN2,IN3)
4
5 %     This function was generated by the Symbolic Math Toolbox version 8.2.
6 %     30-Oct-2021 16:25:16
7
8 c1 = in3(:,1);
9 c2 = in3(:,2);
10 dth1 = in1(3,:);
11 dth2 = in1(4,:);
12 g = in3(:,9);
13 l1 = in3(:,5);
14 m1 = in3(:,3);
15 m2 = in3(:,4);
16 tau1 = in2(1,:);
17 tau2 = in2(2,:);
18 th1 = in1(1,:);
19 th2 = in1(2,:);
20 t2 = sin(th1);
21 t3 = sin(th2);
22 t4 = th1+th2;
23 t5 = sin(t4);
24 b = [tau1+tau2-c1.*g.*m1.*t2-c2.*g.*m2.*t5-g.*l1.*m2.*t2+c2.*dth2.^2.*l1.*m2.*
    *t3+c2.*dth1.*dth2.*l1.*m2.*t3.*2.0;tau1+tau2-c2.*g.*m2.*t5-c2.*dth1.^2.*l1.*m2.*t3];
25
```