

```
1 function [sys, x0, str, ts] = myfunc3(t,x,u,flag)
2 switch flag
3     case 0
4         [sys,x0,str,ts]=mdlInitializeSizes;
5     case 1
6         sys=mdlDerivatives(x,u,t);
7     case 3
8         sys=mdlOutputs(x,u,t);
9     case {2, 4, 9}
10        sys=[];
11    otherwise
12        error(['Unhandled flag = ', num2str(flag)]);
13 end
14 end
```

```
15
16 function [sys, x0, str, ts] = mdlInitializeSizes
17 sizes=simsizes;
18
19 sizes.NumContStates=1;
20 sizes.NumOutputs = 1;
21 sizes.NumInputs = 0;
22
23 sizes.NumDiscStates=0;
24 sizes.DirFeedthrough=0;
25 sizes.NumSampleTimes=1;
26 sys=simsizes(sizes);
27 str=[];
28 ts=[0 0];
29 x0= -0.1;
30 end
```

```
31
32 function sys=mdlDerivatives(x,u,t)
33     sys= nthroot(x,3);
34
```

```
35 end
```

```
36 function sys=mdlOutputs(x,u,t)
37     sys=x;
38 end
39
40
41
42
43
44
```