

Editor - R:\Yeongu\MATLAB EVERYTHING\Compu1_611\Q1\Q1.D\myfunc4.m

myfunc1.m myfunc2.m myfunc3.m myfunc4.m +

```
1 function [sys, x0, str, ts] = myfunc4(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

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= 200;
30 end

32 function sys=mdlDerivatives(x,u,t)
33     sys= -2*(x^2);
34
35 end

36 function sys=mdlOutputs(x,u,t)
37     sys=x;
38 end

39
40
41
42
```