```
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%Section - 03
%Aero 300 PreLab 7 - Runge-Kutta-Fehlberg Methods: 5/16/24
```

Workspace Prep

```
format long     %Allows for more accurate decimals
close all;      %Clears all
clear all;      %Clears Workspace
clc;            %Clears Command Window
```

PART 1: Using ODE45

```
[t, y] = ode45(@fx, [0 10], [1;0]); %Input function, and plot 0-10 initial
value y=1 and y'=0

figure
plot(t,y);
grid on
legend('y','yPrime','Location','best')

function dydt = fx(t,y)
    dydt = [y(2);-(y(1)*y(2))-y(1)]; %isolated y double prime, and create
function
end
```

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