

**Ex:**

Write a script file that does the following:

- i) Creates an array called `DC_data` containing the following data pts:

x values:	0.0	1.0	1.5	2.5
y values:	0.6	1.9	1.5	1.0

- ii) Plots the data pts as blue dots on an  $x$ - $y$  plot.  
iii) Set the range of  $x$  values to  $-1$  to  $3$  and the range of  $y$  values from  $0$  to  $2$ .  
iv) Uses `polyfit( )` to find a constant (zeroth order) fit for the data points in `DC_data`.  
v) Show the constant line on the plot as a red line.

**SOL'N:** i) `x_values = [0, 1, 1.5, 2.5];`

`y_values = [0.6, 1.9, 1.5, 1.0];`

`DC_data = [x_values; y_values];`

ii) `plot(x_values, y_values, 'b.')`

iii) `axis([-1,3,0,2])`

iv) `a = polyfit(x_values, y_values, 0);`

v) `y_fit = a * ones(1,length(x_values));`

`hold on`

`plot(x_values, y_fit, 'r-')`

`hold off`