

(1) Plotting a set of data:

```
t = (0 : 0.1 : 1);  
x = t + 0.5;  
  
% plot(t,x)  
  
plot(t,x, '-ro')  
xlabel('x-axis')  
ylabel('y-axis')  
title('my nice title')
```

(2A) Plotting multiple sets of data with one plot command:

```
t = (0 : 0.1 : 1);  
w = t.^2;  
x = t + 0.5;  
y = t/2;  
  
plot(t,w,'-ro' , t,x,'-bx' , t,y,'-k+')  
xlabel('x-axis')  
ylabel('y-axis')  
title('my nice title')  
legend('w', 'x', 'y')
```

(2B) Plotting multiple sets of data with hold on/hold off commands:

```
t = (0 : 0.1 : 1);  
w = t.^2;  
x = t + 0.5;  
y = t/2;  
  
plot(t,w,'-ro')  
hold on  
plot(t,x,'-bx')  
plot(t,y,'-k+')  
xlabel('x-axis')  
ylabel('y-axis')  
title('my nice title')  
legend('w', 'x', 'y')  
hold off
```

(3) Subplots:

```
t = (0 : 0.1 : 1);  
w = t.^2;  
x = t + 0.5;  
y = t/2;
```

```
subplot(3,1,1)  
plot(t,w,'-ro')  
xlabel('w-axis')
```

```
subplot(3,1,2)  
plot(t,x,'-bx')
```

```
subplot(3,1,3)  
plot(t,y,'-k+')  
ylabel('y-axis')  
title('my nice title')
```

(4) Histograms:

```
clear; clc;
```

```
% Make N random integers between 1 and 6 (like rolling a die N times)  
N = 100;  
array = rand(1,N);  
a = 1;  
b = 6;  
numbers = floor( a + (b-a+1)*array);
```

```
% Histogram of numbers. Try varying the value of N  
% Notice that the center of the bins are not at 1, 2, 3, 4, 5, and 6.  
hist(numbers)
```

```
% This will center the bins at 1, 2, 3, 4, 5 and 6.  
% center = (1:6);  
% hist(numbers,center)
```