

<b>The Hot List</b>	
command	action
help <i>function name</i>	
lookfor <i>keyword</i>	
whos	
ls	
cd	
pwd	
doc	
doc <i>function name</i>	
clear	
;	
%	
...	
:	
ans	
pi	
Inf	
NaN	
eps	
plot( <i>xlist, ylist</i> )	
legend('text', 'text')	
title('text')	
xlabel('text')	
ylabel('text')	
axis([ <i>xmin xmax ymin ymax</i> ])	
grid on	
gtext('text')	
length( <i>vectorname</i> )	
size( <i>matrixname</i> )	
save <i>filename</i>	
load <i>filename</i>	
disp( <i>varname</i> )	

Commands	Output Notes
<pre>&gt;&gt; a = 10 &gt;&gt; sin(a) &gt;&gt; format long &gt;&gt; sin(a)</pre>	
<pre>&gt;&gt; a = [1 2 3] &gt;&gt; b = [1; 2; 3] &gt;&gt; c = [1 2 3]</pre>	
<pre>&gt;&gt; A = [1 2 3; 4 5 6; 7 8 9]</pre>	
<pre>&gt;&gt; A = ones(5) &gt;&gt; B = ones(5,1) &gt;&gt; C = ones(1,5)</pre>	
<pre>&gt;&gt; A = eye(4) &gt;&gt; B = rand(6,2) &gt;&gt; C = zeros(2,5)</pre>	
<pre>&gt;&gt; a = 1:10 &gt;&gt; b = 1:0.5:10 &gt;&gt; c = linspace(1,10,3)</pre>	
<pre>&gt;&gt; A = ones(3,3) &gt;&gt; B = 2*ones(3,3) &gt;&gt; C = A*B &gt;&gt; D = inv(A)*B</pre>	
<pre>&gt;&gt; A = ones(3,3) &gt;&gt; b = rand(3,1) &gt;&gt; c = rand(1,3) &gt;&gt; A*b &gt;&gt; A*c</pre>	
<pre>&gt;&gt; A = 2*ones(3,2) &gt;&gt; B = [1 2; 3 4; 5 6] &gt;&gt; A*B &gt;&gt; A.*B</pre>	
<pre>&gt;&gt; A = [1 2 3; 4 5 6; 7 8 9] &gt;&gt; B = A(2,3) &gt;&gt; C = A(1:2, 1:3) &gt;&gt; D = A(5,5) &gt;&gt; A(5,5) = pi</pre>	
<pre>&gt;&gt; A = 2*ones(4) &gt;&gt; A^2 &gt;&gt; A.^2</pre>	
<pre>&gt;&gt; A = [1 2 3; 4 5 6; 7 8 9] &gt;&gt; A(:)</pre>	
<pre>&gt;&gt; A = [1 2 3; 4 5 6; 7 8 9] &gt;&gt; a = [1 2 3] &gt;&gt; sum(A,1) &gt;&gt; sum(A,2) &gt;&gt; sum(a)</pre>	

Commands	Output Notes
<pre>&gt;&gt; x = 1:40; &gt;&gt; y = x.^2; &gt;&gt; plot(x,y)</pre>	
<pre>&gt;&gt; x = 1:40; &gt;&gt; y1 = x.^2; &gt;&gt; y2 = x.^3; &gt;&gt; plot(x,y1,x,y2)</pre>	
<pre>&gt;&gt; x = 1:40; &gt;&gt; y1 = x.^2; &gt;&gt; y2 = x.^3; &gt;&gt; plot(x,y1,'r-') &gt;&gt; plot(x,y2,'b:')</pre>	
<pre>&gt;&gt; x = 1:40; &gt;&gt; y1 = x.^2; &gt;&gt; y2 = x.^3; &gt;&gt; plot(x,y1,'r-') &gt;&gt; hold on &gt;&gt; plot(x,y2,'b:')</pre>	
<pre>&gt;&gt; x = 1:40; &gt;&gt; y = x.^2; &gt;&gt; plot(x,y,'r-') &gt;&gt; plot(x,y,'ro') &gt;&gt; plot(x,y,'ro','MarkerSize',15)</pre>	
<pre>&gt;&gt; x = 0:.1:1; &gt;&gt; y = 0:.25:1; &gt;&gt; [X,Y] = meshgrid(x,y); &gt;&gt; Z = sin(pi*X).*sin(pi*Y); &gt;&gt; surf(X,Y,Z) &gt;&gt; mesh(X,Y,Z)</pre>	