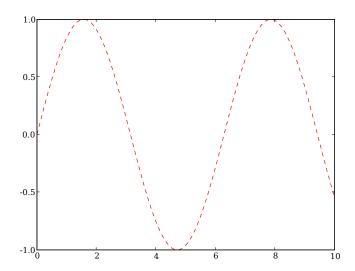
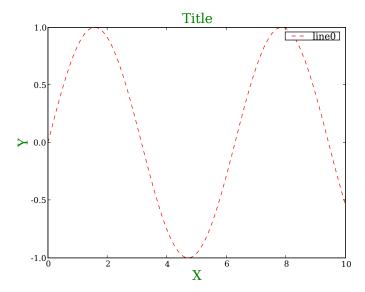
## Matplotlib

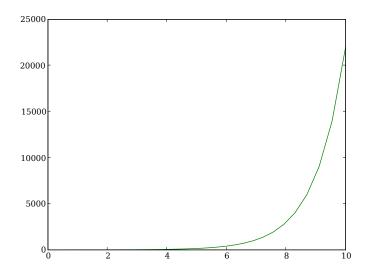
1 Plot a sine function in red with a dashed linestyle



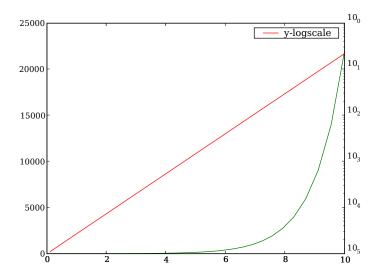
 $2~\mathrm{Add}$  title, labels, legend etc. in font size  $20~\mathrm{and}$  in green



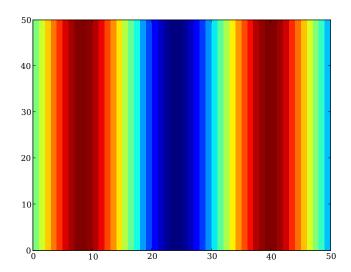
3 On a new figure plot a exp function in green



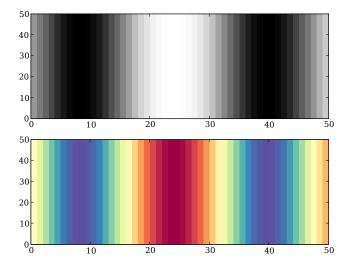
4 Add second y-axis and plot an exponential function on a y-logscale in red



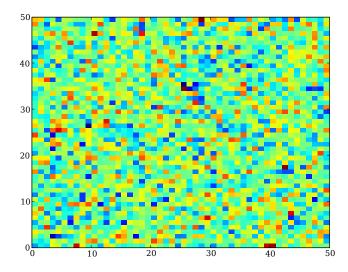
5 Plot a 2D sine function using poolor with flat shading (new figure)



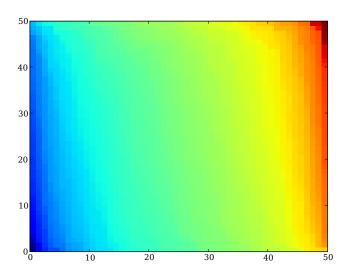
6 Plot the same sine function in a new figure in two different subplot with two different colormaps



7 Generate and plot values (50,50) drawn from a normal distribution



8 Manipulate the array such that the lowest values are in the bottom-left corner, the highest in the top-right



9 Create a sequence of 10 images in which the sine function slowly evolves over time. Update the data in the figure, do NOT create a new figure for each time value

