

Lecture 3 workshop

1. Write a function `randnan.m` that accepts two arguments, `m` and `n`, and returns an $m \times n$ matrix of samples from `randn`, except that all values outside the range `[-2,2]` are set to `NaN`.
2. Write a script `sinehoriz.m` that shows a 256×256 pixel image of a horizontal sine wave with a wavelength of 32 pixels.
3. Write a script `twosquare.m` that makes a MATLAB plot of two concentric squares, the inner one with a thick red line and the outer one with a thin green line. Save the image to a `.tif` file.
4. Write a function `solid.m` that takes as an argument the handle returned from `plot`, and makes the data points of that plot into filled-in symbols, rather than the default outlined symbols. Test your function as follows:

```
x=linspace(-pi,pi,10);  
h=plot(x,sin(x),'ro-');  
solid(h);
```

Hint: use `set` and `get` to examine and manipulate the handle graphics parameters `Color` and `MarkerFaceColor`.