

## Ex:

Write a script file that makes a 3-D lit-surface plot (using meshgrid( )) with interpolated shading of the following function:

 $z = \ln\left(1 + \frac{1}{2}x + \frac{1}{2}\cos^2(2\pi y)\right)$   $0 \le x \le 1 \text{ (9 pts distributed uniformly between 0 and 1)}$  $0 \le y \le 2 \text{ (13 pts distributed uniformly between 0 and 2)}$ 

SoL'N: [xx,yy] = meshgrid(0:1/8:1, 0:1/6:2);  $zz = log(1 + 1/2*xx + 1/2*cos(2*pi*yy).^2);$  surfl(xx,yy,zz)shading interp