Ex:

Write Matlab® commands that create a 3-D lit-surface plot with interpolated shading (and 31 points in each direction) of the following function:

\[ z = \sqrt{|\sin(x + y)|} \]
\[ 0 \leq x \leq 6 \]
\[ 0 \leq y \leq 3 \]

Sol'n:  
\[
x = 0:0.2:6;
\]
\[
y = 0:0.2:6;
\]
\[
[xx,yy] = meshgrid(x,y);
\]
\[
zz = \text{sqrt}(|\text{abs}(.\sin(x+y))|);
\]
\[
surfl(xx,yy,z)
\]
shading interp