

Program_07_4

Requirements

Create an x,y **meshgrid** and evaluate z to form a surface plot for the following equation. Satisfy the following requirements.

$$z = 1.8^{-1.5 \times \sqrt{x^2 + y^2}} \times \cos\left(\frac{1}{2} \times y\right) \times \sin(x)$$

- Create a **meshgrid** with $x=y=-3.5:0.25:3.5$
- Create a **surf** plot with the resulting x, y, and z values
- Provide a title, and axis labels for the surf plot using your previously generated function **labelPlot**. Also, turn grid on using the optional parameter from your **labelPlot** function.

Program

In the code block below, create your program, editing the existing text as necessary.

Note: If you are using Octave then you will need to create a separate script file, save that separate file as the name **Program_07_04**. It will not conflict with this file of the same name since the extension will be different.

Tips:

- When creating the title, using ^ will place characters in superscript as shown in the output. Note that the entire superscript text must be wrapped in curly braces {like this} or only the first character will be superscript.

```
% Filename: Program_07_4
% Author:
% Assisted by:

% Program Description:
```

Example Output

When running your program from the **Command Window**, your output should match the following.

