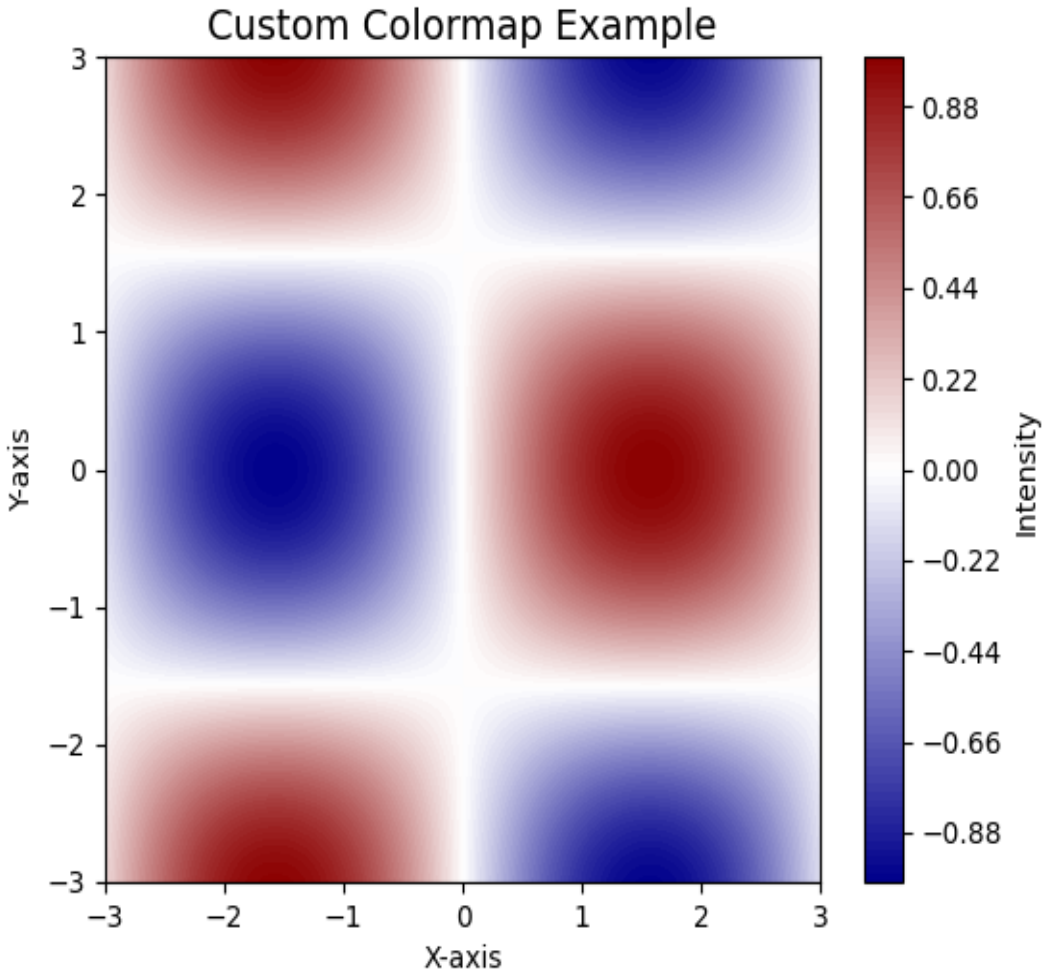
Task 03 - Custom Colormap in Matplotlib

- This task demonstrates how to create and apply a custom colormap in Matplotlib.

Steps:

1. Imported necessary libraries: numpy, matplotlib, LinearSegmentedColormap.
2. Defined a list of colors (dark blue, white, dark red).
3. Created a LinearSegmentedColormap from the list of colors.
4. Generated sample data using a sine-cosine function.
5. Applied the custom colormap in a contour plot with colorbar.



Observations:

1. LinearSegmentedColormap is useful for continuous gradient scales.
2. This approach is particularly effective for heatmaps, contour plots, and scientific data visualization.
3. Custom colormaps allow full control over visualization color schemes.