# Task 4 Report: Geographical Heatmap

## Title

Generating Geographical Heatmap

## Objective

To create a simple map that shows how some values change across different places in the world.

## Tools Used

- Python  
- Matplotlib  
- Cartopy (for drawing maps)

## Steps Followed

- Installed the Cartopy library and other tools in Google Colab.  
- Created some random locations using latitude and longitude.  
- Gave each location a value to represent heat or intensity.  
- Plotted these points on a world map using colors to show different values.  
- Added coastlines, borders, and a color bar to make the map easier to read.

## Result

The final map clearly shows the locations and their corresponding heat values using colors.

## Conclusion

Using Cartopy, it was easy to build a clean and informative heatmap to visualize geographic data.