

Programming Fundamentals for Data Science

Laboratory Session 6

Data Visualisation with Python

A key approach in communicating data to the audience is by using a range of graphical objects, organised as charts and diagrams. This laboratory session will focus on two methods for visualising two-dimensional data, namely heat maps and parallel coordinates.

Task 1

Find the average monthly temperatures of three cities of your choice. Organise the data as comma-separated values (CSV) file. Represent the data by using a heat map. Provide a colour scale for guidance. Allow the user to specify a threshold for the heat map. Based on this threshold value, use different base colours when representing the data points.

Task 2

Represent the data from Task 1 by using parallel coordinates. Use different colours for each city's average monthly temperatures.