Data Visualization

Lab – 2

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Ex. 1

- Load the thermal image 'FLIR_00021.jpeg'
  - Let's suppose that the temperature corresponds to 0.1*pixel value
- Display the image using a diverging colormap centered at 12 degrees, mapping the colormap in the range 4-20 degrees
- Add contours corresponding to 4,8,12,16,20 degrees

Ex. 2

- The file limits_IT_province.geojson includes the contour of all the Italian administrative districts called "province"
- The file polveri.csv includes the data about pollution captured by different sensors in the province of Veneto (the region including Verona) in different years (number of days in which the value of fine dust exceeded the limit)
- Task:
  - compute the average values measured by the different sensors for each “provincia” in 2022 and 2012
  - create a choropleth map with each “provincia” is represented with a categorical color
  - add a symbol map (scattered_geo) with dot size representing the average number of days over limits in 2022 and color representing the increase/decrease with respect to 2012 (think of an optimal colormap to highlight improvements/deteriorations)

Deadline

- Upload the code on the moodle form by Jan 15