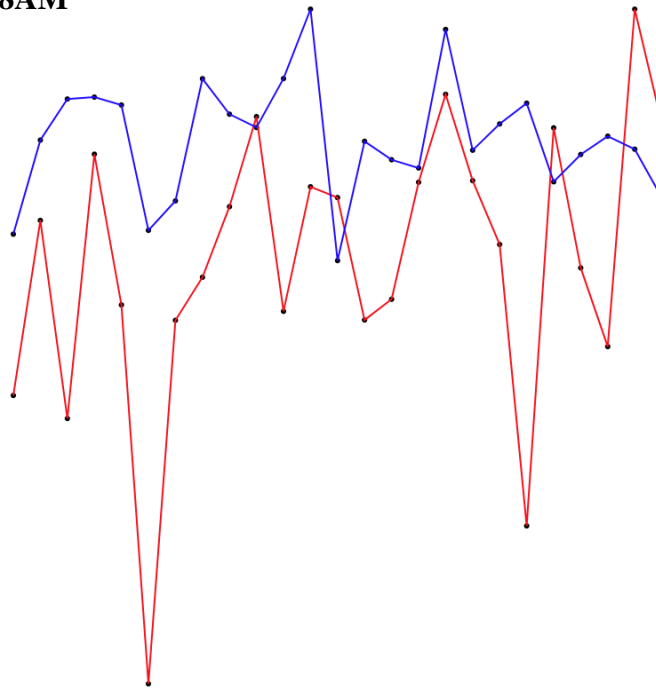


Exercise 1: Create a Line-Chart in JavaScript

(20 points)

Due: 25.04.2022 8AM



Goal of this exercise is to implement a line-chart with HTML/CSS/JavaScript. Attached to this exercise you will find a folder called *linechart* which contains an unfinished implementation of a line-chart. Your task is to finish the implementation such that opening the *index.html* shows a line-chart as depicted in figure above. The figure shows trends (averaged by year) of the temperature (red line) and rainfall (blue line) in Germany from 1991 to 2015. To finish the implementation, follow the steps described as comments within the dedicated file. Each comment starting with *TASK* indicates a position you have to add code. Within the folder *linechart* there are 4 files:

- **index.html (2 points)**
The main entry point of the visualization. When your implementation is finished, opening this file with a browser should show a *linechart*. Currently, opening the *index.html* will show a heading but no visualization.
- **index.js (16 points)**
The main JavaScript entry point which implements a line-chart.
- **index.css (2 points)**
Implements CSS Rules for specific elements.
- **data.js (0 points)**
Initializes a variable called *data* and reflects the dataset we want to visualize. It represents monthly rainfall and temperature of Germany from 1991-2015. Attribute 'pr' is Rainfall in (mm) while 'tas' is the average temperature. There is nothing for you to implement in this file.

Hint: Start editing the files in the following order: *index.html*, *index.js*, *index.css*. Make use of the console output of your browser to check for possible JavaScript errors.

Submission: Zipped linechart folder including all files (index.html, index.js, index.css, data.js)

Please find yourself in Groups of **2 Students**. Only 1 member of the group must submit the exercise in ILIAS.