DOCUMENTATION ABOUT PYHTON AND R

WORKGROUP – Task 2, part 1

We started with the graphical analysis,

To achieve that we used *Matplotlib* and *numpy* library we used for the main task.

Matplotlib is a library mainly used for the representation of graphics. Its documentation is available here: https://matplotlib.org/stable/contents.html# .

NumPy, is a library consisting of multidimensional array objects and a collection of routines for processing those arrays. Using NumPy, mathematical and logical operations on arrays can be performed. Its documentation is available here: https://numpy.org/doc/

After importing matplotlib and numpy, we use gridspec to create advanced subplot.
Gridspec contains classes that help to layout multiple Axes in a grid-like pattern within a figure:

```
fig1 = plt.figure(1, figsize=(16,9))

gs = gridspec.GridSpec(1,2)

gs.update(wspace=0.5)
```

Subsequently:

- We started with the analysis of the gender distribution among the people, finding the distribution of each gender in the dataframe "people" and building a pie chart without gender data:
- We built another pie chart plotting the distribution of the eye color, and create another advanced subplot through gridspec with the analysis of the dataframe "Films".
- We created a barplot graph to display the number of films realized by each director, and a boxplot graph to display the median, quartiles, and outliers for running times.
- we used a scatterplot to display the relationship between the release date and the score

saving all with the high quality grid.

Then using gridspec we :

- plotting to display surface water in each city
- plotting to display climate distribution