❖ **Guidelines of Assignment 8**

In this assignment, you will improve the procedure you had implemented in Assignment 7. You should develop a function that finds the beam irradiation, the diffuse irradiation, and the PXI (without considering external shading) for any city given its latitude).

Accordingly, the function should receive a latitude and the direction of the wall as inputs. and should use pandas read_csv to read the beamIrradiance.csv and diffuseIrradiance.csv as DataFrames. It should then extract the corresponding values for the given direction. In case the latitude is not the one given in the table, it should interpolate (guidelines for the corresponding procedure are given in the assignment folder).It you should sum them up (for this assignment we neglect the external shading) and return the PXI of the window in that direction.

You should then use this function to find the PXI values of windows for RLF example I (for the city of Piacenza: latitude_location=45). In order to do so, you will need to write a "for loop" similar to the one which is given in the guidelines.

You should then use "read_csv" to read the "windows.csv" in which you have a column called PXI. You should update that column in a way that the value of each row would be the PXI value that you obtained in the previous step. Finally, you should use "to_csv" to write the modified windows DataFrame to a file called "windows_completed_withPXI"

You can find a python script in this folder, which shows a similar procedure, you can use it as a guideline to implement the procedure of assignment 8.

🞂 Submission procedure: Submission procedure is the same as the previous assignments just remember to put you assignment file (assignment8_yourSurname.py) in a folder which is called "Assignment8_yourSurname" before adding it to the" Assignment 8 Pandas C- Deadline Nov 28th 2017"