

Out[1]: The raw code for this IPython notebook is by default hidden for easier reading. To toggle on/off the raw code, click [here](#).

Exercise 1 - Linear and logistic regression

In this exercise, we are going to apply linear and logistic regression to two datasets and study the results. The datasets are artificial and represent the salary (target variable) according to employee experience.

1. Start by loading the dataset, Salary_Data.csv.
2. Using the `corrcoef` library of `numpy`, compute the correlation matrix
3. Display the data on a graph.
4. Create a linear regression model from the data using the `scikit-learn` `LinearRegression` package.
5. What is the error ?
6. Plot the linear regression curve on a graph, in addition to the data in the dataset
7. Do again the steps 1 to 5, but Salary_Data2.csv dataset. Any conclusion ?
8. Transform your dataset to create additional columns x^0 , x^2 , et x^3 and do again linear regression.
9. Plot the linear regression curve on a graph, along with the **initial (Salary_Data2.csv)** dataset data