LAB PRACTICE 6 (WEEK 7)

Learning Outcomes

The goal of this lab session is to revise all the previously learned techniques:

1. Simple Linear Regression
2. Multiple Linear Regression
3. Logistic Regression
4. Naïve Bayes
5. Linear Discriminant Analysis
6. Quadratic Discriminant Analysis
7. Singular value decomposition (SVD)
8. Principle component analysis (PCA)

The country-data (in Ulearn) is downloaded from Kaggle (https://www.kaggle.com/rohan0301/unsupervised-learning-on-country-data). It contains the variables described in the table below

country	Name of the country
child_mort	Death of children under 5 years of age per 1000 live births
exports	Exports of goods and services per capita. Given as %age of the GDP per capita
health	Total health spending per capita. Given as %age of GDP per capita
imports	Imports of goods and services per capita. Given as %age of the GDP per capita
income	Net income per person
inflation	The measurement of the annual growth rate of the Total GDP
life_expec	The average number of years a newborn child would live if the current mortality patterns are to remain the same
total_fer	The number of children that would be born to each woman if the current age-fertility rates remain the same.
gdpp	The GDP per capita. Calculated as the Total GDP divided by the total population.

Using the country-data,

- implement all the above-mentioned techniques (decide on the variables to be used)
- explain your choices of the used variables
- Interpret all the results

**************The End*****************