### **Getting familiar with the environment**

- 1. How to use google collab for ML
- 2. How to mount google drive to google collab
- 3. How to write code in an interactive way and execute it(Jupyter notebook and google collab)
- 4. How to install jupyter notebook in your local machine

### Recap some concepts of linear algebra

1. Matrix operations(multiplication, inverse, transpose, identity)

## **Getting familiar with python**

- 1. Learn the basics (variables, control structure, loops, strings, error handling and functions)
- 2. How to solve linear equations with python
- 3. How to solve matrix problems with python(converting column vector to row vector, slicing row vectors into different columns)

# **Learn Numpy**

1. How NumPy array works and why is it necessary

# **Learn pandas**

- 1. How panda handles data frame, and why panda is so useful
- 2. What operations can be done on the data frame using panda
- 3. How to normalize data

## **Evaluation criteria:**

As it is a 0.75 credit lab, in the best-case scenario there will be 6/7 labs(1 lab already took place).

#### **Daily task**

There will be tasks given at the lab and you have to solve them at the lab on the given time; also there will be some home tasks given as assignments with due time which you have to submit.(An example given by sir is- 10 problems will be given, you may have to do 5 problems in the lab and 5 are home task)

#### **Project**

Team-based project with 3 people, the scope and criteria of the project isn't disclosed yet. The evaluation of the project will be on 3 sections-

- 1. Report writing(documentation of the project)
- 2. evaluation( the outcome of the project and its accuracy levels)
- 3. implementation(Which concepts of the lab did you implement on your project, why and how? and what are the problems that you faced while implementing)

Ar kisu mone nai, janle bolbone....