**Soil Moisture Prediction:**

**Goal:**

The objective is to accurately predict the soil moisture level multiple days in advance. This solution will help farmers prepare their irrigation schedules more efficiently.

**Dataset Description:**

We are provided with data from four fields on which to train your model. We need to predict, in 5-minute increments, the last four days for soil humidities in fields 1 and 3 and need to predict, in 5-minute increments, the last six days for soil humidities in fields 2 and 4.

**The fields were irrigated and growing crops as follows:**

* Field 1: Maize, less water irrigation
* Field 2: Peanuts, irrigation based on water loss
* Field 3: Peanuts, less water irrigation
* Field 4: Peanuts, normal irrigation

**The IoT soil moisture sensors were set up in each of the fields and an IoT weather station was set up near the fields. These IoT devices transmitted the following data in five-minute intervals:**

* Soil humidity
* Air temperature (C)
* Air humidity (%)
* Pressure (KPa)
* Wind speed (Km/h)
* Wind gust (Km/h)
* Wind direction (Deg)

**Note:** An **“irrigation”** variable associated with each of the four field. The irrigation variable is **set to 1** when the irrigation is **turned on** and the soil moisture is rising and **set to 0** when the irrigation is **turned off**.