**Question 2.1**

Describe a situation or problem from your job, everyday life, current events, etc., for which a classification model would be appropriate. List some (up to 5) predictors that you might use.

I was given a task by my company to classify the grains in the storage into three different categories from grade A, grade B and grade C. The data collection was through the IoT devices located in the silo and storage bins. The data for the temperature, CO2 level and the humidity are collected every 10 min from various sensors. In addition to the sensor data, I used the grain quality from the analyzers as well as the some physical measurements such as the initial weight of the grain for the volume of 1 cube meter of the grain. I have implemented my forecasting method by leveraging five features including:

1-Temprature

2-Humidity

3-CO2 level

4-Grain weight in the beginning of the storage

5-Crushed grain protein level from the analyzers