**EE5253 – Machine Learning**

**Group Number :** 22

**Date of Submission :** 15th Jan 2024

**Name of Students and index numbers:**

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* EG/2020/4252 Vihanga V. M. B. P

**Project Topic :** Weather Prediction

**ML Problem :** Supervised

**Problem Type :** Classification

**Number of Features:** 24

**Output Variable :** Weather code

10 outcomes :

* 0 - 'Cloud development not observed or observable',
* 1 - 'Clouds dissolving or becoming less developed',
* 2 - 'State of sky on the whole unchanged',
* 3 - 'Clouds generally forming or developing',
* 51 - 'Drizzle, not freezing, continuous ( slight at time of observation)',
* 53 - 'Drizzle, not freezing, continuous ( moderate at time of observation)',
* 55 - 'Drizzle, not freezing, continuous ( heavy (dense) at time of observation)',
* 61 - 'Rain, not freezing, continuous ( slight at time of observation)',
* 63 - 'Rain, not freezing, continuous ( moderate at time of observation)',
* 65 - 'Rain, not freezing, continuous ( heavy at time of observation)'

**Algorithms Used :**

1. SVM
2. Random Forest

**Link to the code :**

* GitHub link :

<https://github.com/Pabasara715/Machine_Learning_Project_Weather_Prediction.git>

* Google Colab:

<https://colab.research.google.com/drive/1GvVuyU9tUX3LYYDZj3BKwJkHJHHaeD4l?usp=sharing>