



## Dear Participant,

Welcome to **Data Science and Machine Learning** track of Spectrum Internship drive. A quick intro by the way, Data Science and Machine learning, as cool as it sounds, is actually even more cooler than that. Summing it up into a single sentence, *"A field that deals with finding the patterns around you in nature, and using them to make intelligent decisions, and of course, predicting the future ;)"*

Your internship will be basically divided into **3 phases**, each one with it's own tasks and questions. All the tasks are designed in such a way that they will give you an insight in the field of data science, while simultaneously improving your coding and data science skills.

**Note:** Do go through the prerequisites documents properly, especially how to use a google colaboratory notebook. All your tasks will be based on working with google colaboratory, so we expect you to be able to use it well.

## TASK 1 :

### Prerequisites::

- Python
- Google Colaboratory

### Technology Stack to be used:

- Python
- Numpy
- Pandas

### Tasks:

So, to start with your journey, click on the link below and open the colaboratory notebook.

[https://colab.research.google.com/drive/1bGG95mIGjuwTcS7cz13jan4t18RA\\_GZX?usp=sharing](https://colab.research.google.com/drive/1bGG95mIGjuwTcS7cz13jan4t18RA_GZX?usp=sharing)



## Important Instructions before attempting the task:

- After opening the link above, go to top left and click on File->Save a Copy in Drive. Wait for a few seconds, and a new window will open. This will be the copy of the Task 1 colaboratory notebook. You have to attempt your task 1 in this copy.
- Your colaboratory notebook is saved, but everytime you close and reopen it again, you have to run all the cells, till the last cell you have coded, to download all the datasets and give the notebook a fresh run.

## Submission Guidelines:

- You can submit your task by 1 by
  - Uploading your task to google drive or a public github repository.
  - Sharing the link of your google colaboratory.
- For the first method, upon completion of your task, go to top left and click on File->Download->Download .ipynb. Then upload the downloaded file to either Github, or drive. Copy the link for github, or for google drive, right click on the uploaded file, click Share, then click on "Change to anyone with the link", then Copy Link, and submit that link in the Dashboard.
- For the second method, similar to how you would do it with google drive, click on Share button on the top right of the colaboratory notebook, then click on "Change", then copy link, and submit the copied link.

In case of any confusion or queries, you can drop a text in the data science thread in our slack channel. To join the slack channel, log in to your dashboard at <https://internship.spectrumcet.com> , and click on the bottom right slack button.

**LAST DATE OF SUBMISSION: 30/06/2021**

Warm regards,

**SPECTRUM, CET-B**