

**WiDS ‘22 - ‘23 Final Documentation**

**<Project UID - Name>**

**<Mentors>**

| **Team Member Name** | **Roll Number** | **Email-Id** |
| --- | --- | --- |
| **Prathamesh Deshmukh** | **20b080025** | **prathamesh.120602@gmail.com** |

**Introduction to Problem Statement**

| What is Data Analytics, how to analyse the data using Python and draw conclusions and inferences from the analysis. How to regress some available data, how to perform numpy calculations, how to use seaborn and matplotlib to visualise the data results, etc. |
| --- |

**Existing Resources**

| **Python Basics** **:** (till 1:44:40[modules])  [Data Analysis with Python for Excel Users - Full Course](https://youtu.be/WcDaZ67TVRo)  **Numpy:**  [Python NumPy Tutorial for Beginners](https://youtu.be/QUT1VHiLmmI)  **Pandas :**  <https://www.youtube.com/playlist?list=PL-osiE80TeTsWmV9i9c58mdDCSskIFdDS>  –<https://www.hackerearth.com/practice/machine-learning/data-manipulation-visualisation-r-python/tutorial-data-manipulation-numpy-pandas-python/tutorial/>  **Matplotlib :**  [Python Plotting Tutorial w/ Matplotlib & Pandas (Line Graph, Histogram, Pie Chart, Box & Whiskers)](https://www.youtube.com/watch?v=0P7QnIQDBJY&t=58s)  **Seaborn :**  [Seaborn Tutorial : Seaborn Full Course](https://www.youtube.com/watch?v=6GUZXDef2U0)  **Must Do** :  (21-30) **Code along the way** (required in the final report submission)  [Python for Data Analysis - YouTube](https://www.youtube.com/playlist?list=PLiC1doDIe9rCYWmH9wIEYEXXaJ4KAi3jc)  Documentations :  <https://numpy.org/doc/stable/user/absolute_beginners.html>  <https://pandas.pydata.org/docs/getting_started/intro_tutorials/index.html>  <https://matplotlib.org/stable/tutorials/introductory/quick_start.html>  <https://seaborn.pydata.org/tutorial.html> |
| --- |

**Proposed Solution**

| Solution was to solve the problems uploaded using the datasets given, by applying the things learnt from the resources uploaded. |
| --- |

**Methodology & Progress (Mention the work done week-wise)**

| In the first week, we learnt about the basics of the Python language, it was for those who are unaware of the syntax of the python.  Then, from the second week, we started learning about NumPy and its applications, what arrays are and how they function, and what their applications are in data analytics.  In the third week, I learnt about the use of pandas and their applications. How are they required for multidimensional arrays and stuff.  In the 4th week we learnt about the visualisation tools and packages, namely matplotlib and seaborn and making graphs and charts using them. How we visualise the data and draw conclusions and inferences from them. |
| --- |

**Results**

| Please add the link to drive folder/ github page consisting of code files and reports  https://github.com/PrathameshDP/Data\_Analytics.py |
| --- |

**Learning Value**

| **Got a good exposure in the field of Data Analytics and gave a confidence to be data scientist, analyst and go on a career path in tech fields.** |
| --- |

**Tech-stack Used**

| **Jupyter notebook and its libraries** |
| --- |

**Suggestions for others**

|  |
| --- |

**Contribution by each Team Member**

|  |
| --- |

**References and Citations**

|  |
| --- |