Maths-Assignment-1

Task 1 - Hands On Assignment

- Data Analysis in python
- Web Scraping using Beautiful Soup
- Random Variate Generation

Run the notebooks discussed in class and upload it in the respective folders in the HandsOn link below.

Task 2 - Case Study Assignment

Perform data analysis on the suicides dataset and answer the following question:
1. Data Preprocessing
    a. Name the categorical and numerical columns in the dataset.
    b. Find the number of unique values in the following columns - country, year, sex, age, generation
    c. Plot a heatmap of the missing values in the dataset.
    d. Find the number of outliers in each numeric column and remove them.
    e. Find the attributes with the highest correlation coefficient.

2. Data Visualization
    a. Plot a pie chart of the 'suicides/100k pop' per generation.
    b. Plot a line plot of population vs suicides_no.
    c. Plot a barplot of the 'gdp_per_capita ($)' per year.
    d. Plot a distplot for the 'suicides/100k pop'

Link to dataset:
https://drive.google.com/file/d/1YAmdi9LxlSaNvLO5cM2U8bDiAbq1uPwO/view?usp=drive_link

Submission Guidelines

Task 1

Upload your notebook to the below drive with the following naming format:
SRN_HandsOn1_Section.ipynb in each folder.
Drive link for submission:
https://drive.google.com/drive/folders/1YSLKvFFb2wWi5UYhFMQht1dh4oCofvTB?usp=sharing

Task 2

Upload your notebook to the below drive with the following naming format:
SRN_Assignment1_Section.ipynb
Drive link for submission:
https://drive.google.com/drive/folders/1vBFdgfp46ygovN8c5YtQbWg8UaZV1Vgi?usp=sharing

Deadline for submission - 12 Sept 2024,23:59