

# DATA SCIENCE FUNDAMENTALS

## Assignment-01

**Date- 07/09/23**

Problem Statement – Analyze any dataset

Dataset of housing from kaggle and performed exploratory data analysis using pandas-profiling and using other python functions.

Dataset link - <https://www.kaggle.com/datasets/ashydv/housing-dataset>

ydata-profiling delivers an extended analysis of a DataFrame while allowing the data analysis to be exported in different formats such as **html** and **json**.

Here final report of analysis is saved in html format

Repository – [click here](#) (download housing.html file and then open to see report)

Step by Step exploratory data analysis using python functions.

- 1) The `df.info()` function will give us the basic information about the dataset

#Basic information

`df.info()`

#Describe the data- descriptive statistics

`df.describe()`

- 2) `df.duplicate.sum()` function to the sum of duplicate value present if any. It will show the number of duplicate values if they are present in the data.

#Find the duplicates

`df.duplicated().sum()`

- 3) find the number of unique values in the particular column using `unique()` function in python.

`df['area'].unique()`

- 4) Know the datatypes –

#Datatypes

`df.dtypes`