**Project 2**

**Car Advertising-Determining Futuristic Sales**

**Aim:**

The ultimate goal of the project is to build a machine learning model that could predict the futuristic sales of a car given its current sales current advertising medium spends.

**Hardware/Software Preference:**

A windows PC with windows 10 or higher software/ Macbook updated to the latest version is Preferrable.

**Suggested Tools/Tech Stacks:**

Python 3 latest version, Jupyter Notebook, any similar IDE with its most recent version,with necessary libraries/dependencies/packages could be used for working in this project.

**Suggested Approach:**

**Step 1:** Download the **advertising** dataset.

**Step 2:** Import it into the environment(say Jupyter Notebook) and store it as a dataframe.

**Step 3:** Check data for its values,measures of central tendency and dispersion.

**Step 4:** Perform data preprocessing such as Null value treatment/missing value treatment and outlier treatment.

**Step 5:** Perform Visualisations, Univariate and Bi-Variate Analysis and find correlations,trends and patterns among the variable.

**Step 6:** You can now split the data into X and Y to make it ready for training purposes.

**Step 7:** You can now train the data with a Regression Model(say Linear Regression Model) with appropriate train test split.

**Step 8:** Test the data by giving X-test as a parameter. Now you can get the value for Y-predicted, which is your futuristic value.

**Step 9:** Compare it against the original Y-Test value and calculate the MSE,MAE etc. The model with least error is the best model.

**Expected Output:**

A regresssion model is built to predict the futuristic sales with present data and the accuracy of the model is measured.