**ICP4**

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GitHub Link : <https://github.com/revvanthhh/ICP4>

**Question 1: Data Manipulation**

1. Reading .csv file
2. Showing data using the head () function
3. Checking if NULL values are available in the dataset.

Graphical user interface, text

Description automatically generated

1. Filling the NULL values with Mean
2. Rechecking if NULL values are there.
3. Performing Aggregation operations.

Text

Description automatically generated with medium confidence

1. Filtering the data with clauses.

Text

Description automatically generated

1. Showing all columns in the data frame except Maxpulse in a new data frame.
2. Deleting Maxpulse from the main data frame.
3. Displaying existing datatypes in the data frame

Text

Description automatically generated

1. Replacing Calories column datatype with an integer.
2. Visualizing it using scatter plot

A picture containing chart

Description automatically generated

**Question 2: Linear Regression**

a) Import the given “Salary\_Data.csv”

b) Split the data in train\_test partitions, such that 1/3 of the data is reserved as test subset.

c) Train and predict the model.

d) Calculate the mean\_squared error

e) Visualize both train and test data using scatter plot

Graphical user interface, text, application

Description automatically generated

Graphical user interface, website, line chart

Description automatically generated