**Project Name**: **“Prediction Age”**

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**Introduction:**

My project is Age prediction for given height and weight . This dataset has 3 rows and provides the height, weight and Age (outcome) of the person. We have to build and train a model on this dataset so it can predict the Age of a person given their height and weight.

**Sample Data:**

|  |  |  |
| --- | --- | --- |
| **Height** | **Weight** | **Age** |
| **5** | **45** | **24** |
| **4.9** | **44** | **44** |
| **5.5** | **50** | **30** |

**Brief Description:**

In order to make our dataset compatible with machine learning algorithms contained in Sci-kit Learn library. Data was collected in csv file . The dataset used in this project contains 3 variables(including target value).The independent variable that needs to be predicted . Features information: 1.Height - Height of the person in Feet 2.Weight - Weight of the person in kg First we read the csv file with the “read\_csv” function in Pandas(a library function) . Then we separated the data in features and in column vector . we used “train\_test\_split” function to split the matrix into train and test subsets . Then we will use these models : linear regression: Regression models a target prediction value based on independent variables. It is mostly used for finding out the relationship between variables and forecasting. Different regression models differ based on – the kind of relationship between dependent and independent variables, they are considering and the number of independent variables being used. Gradient descent is an optimization algorithm used to minimize some function by iteratively moving in the direction of steepest descent as defined by the negative of the gradient. In machine learning, we use gradient descent to update the parameters of our model.

i)Linear Regression:

*Linear Regression determine the extent to which there is a linear relationship between a dependent variable and one or more independent variables. In simple linear regression a single independent variable is used to predict the value of a dependent variable.*

**Result:**

In Linear Regression Algorithm.

Accuracy: **1.0**

**Challenges:**

1. This is a non-classifier problem. So, Can’t find any algorithm accept Linear Regression.
2. Less accuracy.

**Screenshot:**









