# Introduction to Supervised Learning

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What is Supervised Learning?

# Supervised Learning

Supervised learning is an important aspect of Data Science. Supervised learning is the machine learning task of inferring a function from labelled training data. The training data consists of a set of training examples

#### Classification

a classification algorithm will be given data points with an assigned category. The job of a classification algorithm is to then take an input value and assign it a class, or category, that it fits into based on the training data provided. (Toward Data Science)

## The Algorithm

- 1. Linear Classifiers
- 2. Support Vector Machines
- 3. Decision Trees
- 4. K-Nearest Neighbor
- 5. Random Forest

## Regression

Regression is a predictive statistical process where the model attempts to find the important relationship between dependent and independent variables. The goal of a regression algorithm is to predict a continuous number such as sales, income, and test scores. (Toward Data Science)

## Different type of Regression

- 1. Linear Regression
- 2. Logistic Regression
- 3. Polynomial Regression

#### Assessment

- 1. Learn one of the supervised learning algorithm. Try to understand the concept, flowchart, and the implementation.
- 2. Try to use scikit-learn, pandas, numpy library in python.
- 3. Try to use google colab.