Group Number: 51

Name and Index Number of the Students

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Project Title: Prediction of Concrete Compressive Strength

Project Description:

Overview

The objective of this project is to predict the compressive strength of concrete using various input components through machine learning techniques. We will utilize a dataset containing quantitative measurements of different concrete components and the resulting compressive strength. The primary focus will be on applying linear regression and SVM to establish a relationship between the input variables and the concrete compressive strength, which is a regression problem.

Expected Outcome:

By the end of this project, we aim to have a robust model that can accurately predict the compressive strength of concrete based on its components. This can aid in optimizing concrete mixtures for construction purposes, ensuring the desired strength and quality

Dataset Link:
https://archive.ics.uci.edu/dataset/165/concrete+compressive+strength

Original Number of Features in the Dataset: 8

Target Variable (For Supervised Learning): Concrete Compressive Strength

Type of the Problem: Supervised - Regression

Algorithm Selected:

Algorithm 01:
Linear Regression

Algorithm 02:
SVM