



## Introduction to Data Science Supervised learning (Regression)

Suppose you are working on a project to predict a person's shoe size based on their height in centimeters. Here are the variables in the dataset:

- Height (numeric): The height of the person in centimeters.
- Shoe size (numeric): The shoe size of the person.

Using this dataset, you could build a regression model to predict a person's shoe size based on their height. You could use techniques such as linear regression, polynomial regression, or regression trees to build the model.

Here's a sample of the data:

Height (cm)	Shoe size
140	7
150	8
160	9
170	10
180	11

**(10pt)** Based on this data, you could build a regression model that predicts a person's shoe size based on their height. The model would take in a person's height as input and output a predicted shoe size.