Solving a Regression Problem: Ordinary Least Squares to Gradient Descent

Learn about how the linear regression problem is solved analytically (using Ordinary Least Squares) and algorithmically (using Gradient Descent) and how these two methods are connected!

Linear regression finds a linear relationship between one or more predictor variables and an outcome variable. This article will explore two different ways of finding linear relationships: *Ordinary Least Squares* and *Gradient Descent*.

Ordinary Least Squares

To understand the method of least squares, let's take a look at how to set up the linear regression problem with linear equations. We'll use the <u>Diabetes dataset</u> as