**Gradient descent**

An algorithm to minimize a function by optimizing params

Algo 🡪 set of instruction that works on data in a particular way

Ex: a person A has attended a test 🡪 total marks is 50

Person A goes to person B and asks , guess how many marks have I got??

Guess 1 🡪 40 🡪 no its too High

Guess 2 🡪 30 🡪 nope 30 is too low

Guess 3 🡪 35 🡪 you are close now 😊

**That’s how this algo works internally. Start with random guess and then move to best answer.**

New value( new guess) = old value ( prev guess) – step size

Step size 🡪 Learning rate \*\* slope

What is learning rate and slope?

Ex: lets take an example of a function

Y = (x)^2 🡪 (x)squared