**Problem statement**

Given x (len n) y(len n) find best linear relationship between x and y such that it reduces the loss function

Let parameters be **m** and **b**

guessi = mxi + b

loss = ( yi - guessi)2

= ( mxi + b - guessi)2

= (errori)2

dL/dei =2 \* errori

dei/dm = xi

dei/db = 1

dL/dm = dl/dei \* dei/dm = 2 \* xi \* errori

dL/db = db/dei \* dei/db = 2 \* errori