## **Computing Partial Derivatives**

How do I compute 𝚫w and 𝚫b

1. Consider the following example
2. Loss = (where f(xi) refers to the sigmoid function)
3. Let’s consider only one term in this sum
4. (where refers to the gradient/partial derivative of L(w,b) w.r.t w)
5. Using chain rule, we expand it
   1. , Let’s look into the derivative of the sigmoid function in detail
   2. Therefore,
6. For each of the 5 points
   1. Similarly