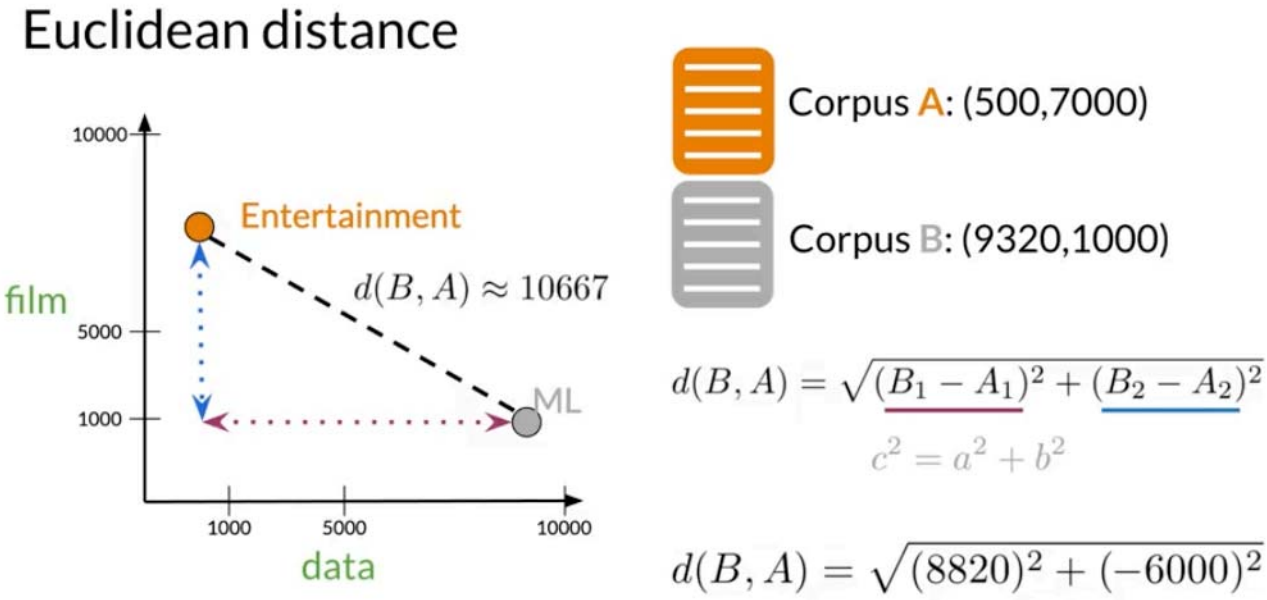
Euclidian Distance

Let us assume that you want to compute the distance between two points: A, B. To do so, you can use the euclidean distance defined as

$$d(B, A) = \sqrt{((B_1 - A_1)^2 + (B_2 - A_2)^2)}$$



You can generalize finding the distance between the two points (A, B) to the distance between an n dimensional vector as follows:

$$d(\vec{v}, \vec{w}) = \sqrt{\sum_{i=1}^{n}(v_i - w_i)^2}$$

Here is an example where I calculate the distance between 2 vectors ($n = 3$).