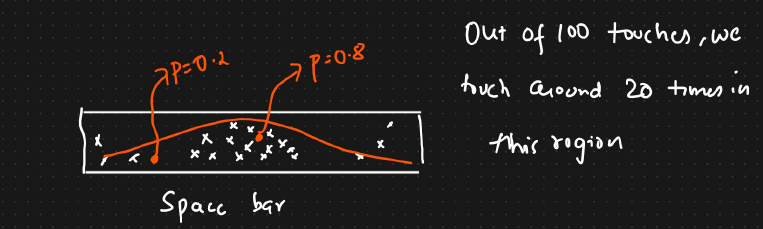
P Value:

Definition: The p value is a number, calculated from a statistical test, that describes how likely you are to have found a particular set of observations if the null hypothesis were true. P values are used in hypothesis testing to help decide whether to reject the null hypothesis.



P value basically talks about the probability of a specific outcome in a specific region.

Hypothesis testing:

Example: To determine whether a coin is fair or not.

1. Null Hypothesis (): Coin is fair

2. Alternate Hypothesis (): Coin is not fair

3. Experiment: Tossing the coin for 100 times.

We define a confidence interval.

4. Significance value (): Let’s say it is 0.05 <- Value is different for different problem statements.

It is defined by a domain expert.

Confidence Interval = 1 – = 0.95

5. Conclusion: If p value is < significance value

Then we have to reject the null hypothesis

Else

We fail to reject the null hypothesis

