Type I and II Error

Null and Alternate Hypothesis?

Hypothesis = Assumption

Drinking Sugary drinks daily Leads to being Overweight

Null Hypothesis

- **there is no statistical significance difference between the two variables in the hypothesis.**
- Example : There is no statistically significant relationship between the type of water I feed the flowers and growth of the flowers.
- often represented by H0 (H-zero)

Alternate Hypothesis

- **A statistical hypothesis used in hypothesis testing, which states that there is a significant difference between the set of variables.**
- denoted by H1 (H-one)

	H_0 is actually:	
	True	False
Reject H_0	Type I error	Correct
Accept H_0	Correct	Type II error

Example

tested for COVID-19 based on mild symptoms.

There are two errors that could potentially occur:

- The test result says you have coronavirus, but you actually don't :
  Type I error (false positive)
- **Denoted by alpha (α),**
- The test result says you don't have coronavirus, but you actually do :
  Type II error (false negative)
- **Denoted by beta (β)**