

2025

4Geeks Academy: data science cohort 12

# DAY 13: HYPOTHESIS TESTING

# TODO

## HYPOTHESIS TESTING

Null and alternative hypothesis, interpretation of significance and p-values.

## PROBABILITY DISTRIBUTIONS PROJECT

Submit Probability Distributions Exercises Project in Python (Random variables module), if you haven't done so already

## HYPOTHESIS TESTING PROJECT

Submit Hypothesis Testing Exercises in Python (Hypothesis testing module), if you haven't already

# TOPICS

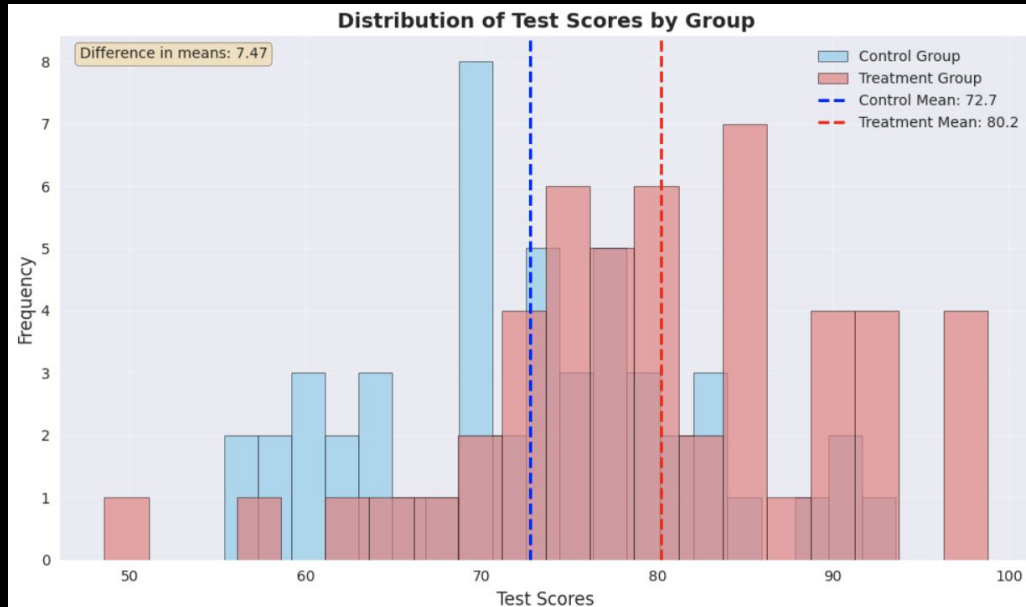
01 NULL & ALTERNATIVE HYPOTHESES

02 OTHER TESTS

# NULL & ALTERNATIVE HYPOTHESIS

**NULL HYPOTHESIS** Any observed difference in means is due to chance

**ALTERNATIVE HYPOTHESIS** The difference in means is not due to chance



# OTHER TESTS

## DISCRETE VARIABLES

Chi-square test > Fisher's exact test > Barnard's test

## CONTINUOUS VARIABLES

		DATA DISTRIBUTION	
		'Normal'	Not 'Normal'
NUMBER OF GROUPS	Two	T-test	Mann-Whitney U test
	More than two	F-test	Kruskal–Wallis test