

# Hypothesis Testing Exercise

A F&B manager wants to determine whether there is any significant difference in the diameter of the cutlet between two units. A randomly selected sample of cutlets was collected from both units and measured? Analyze the data and draw inferences at 5% significance level. Please state the assumptions and tests that you carried out to check validity of the assumptions.

File : **Cutlets.csv**

# Hypothesis Testing Exercise

A hospital wants to determine whether there is any difference in the average Turn Around Time (TAT) of reports of the laboratories on their preferred list. They collected a random sample and recorded TAT for reports of 4 laboratories. TAT is defined as sample collected to report dispatch.

Analyze the data and determine whether there is any difference in average TAT among the different laboratories at 5% significance level.

File: **LabTAT.csv**

# Hypothesis Testing Exercise

Sales of products in four different regions is tabulated for males and females. Find if male-female buyer ratios are similar across regions.

	East	West	North	South
Males	50	142	131	70
Females	550	351	480	350

$H_0$

• All proportions are equal

$H_a$

• Not all Proportions are equal

1. Check p-value
2. If p-Value < alpha, we reject Null Hypothesis

Buyer Ratio.csv

# Hypothesis Testing Exercise

TeleCall uses 4 centers around the globe to process customer order forms. They audit a certain % of the customer order forms. Any error in order form renders it defective and has to be reworked before processing. The manager wants to check whether the defective % varies by centre. Please analyze the data at 5% significance level and help the manager draw appropriate inferences

File: **CustomerOrderForm.csv**

Fantaloons Sales managers commented that % of males versus females walking in to the store differ based on day of the week. Analyze the data and determine whether there is evidence at 5 % significance level to support this hypothesis.

File: **Fantaloons.csv**