

Shapiro - Wilk Test

$H_0 \rightarrow$ Normally distributed

$H_a \rightarrow$ Not normal ✓

- normality

- t , p -value 0.05

$\alpha = 5\%$

\swarrow $p\text{-value} \leq \alpha \rightarrow H_a$

\searrow $p\text{-value} > \alpha \rightarrow H_0$

- $N \geq 5000 \rightarrow$ vulnerable

Non-Parametric Tests

$H_0 \rightarrow$ Same distribution

$H_a \rightarrow$ Diff "

$p \leq \alpha \rightarrow$ Reject H_0 [H_a a/c]

else \rightarrow Accept H_0

)

Mann-Whitney U Test

- 2 independent samples drawn from a population
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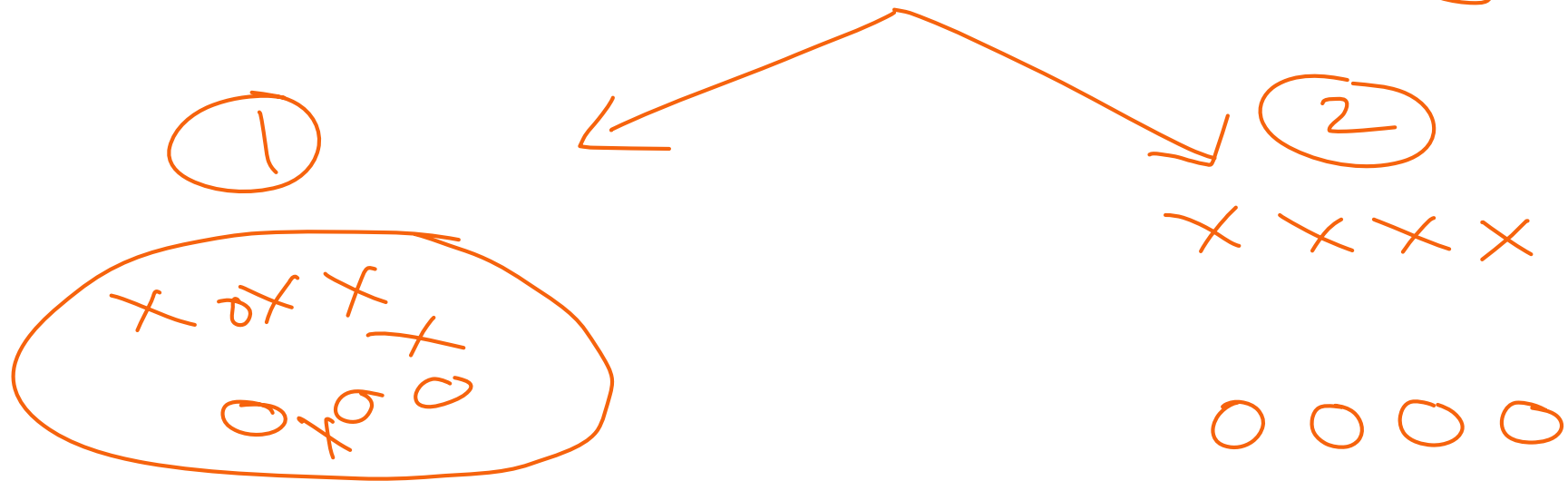


Same distribution

Steps

— Combine

— Rank ordered together



Wilcoxon Signed-Rank Test

- 2 dependent samples
- paired / related

Kruskal - Wallis H Test

- 3+ samples
- ANOVA Test \rightarrow non-p. version
- Generalization of Mann -

— at least one sample
is diff from others.

—

Friedman Test

- Pairwise

- analysis of variance (ANOVA)

$H_0 \rightarrow$ Paired sample
distributions equal

$H_a \rightarrow$ else