# **CA2 - MSc in Data Analytics**

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# Abstract

# Data Preparation

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# Inferential Statistics

# Butter Sample t-test

As part of the inferential statistics section above I was interested in the shelf life of butter. I took samples of butter and cream-based spreads in Tesco and Aldi.

Sample for Tesco:

N = 6

Average Self Life: 100.5 days

Standard Deviation: 18.05

Sample for Aldi:

N = 6

Average: 109.3

Standard Deviation: 30.09

Significance level = 0.05

H0 is that the self life of the two supermarkets is the same

H1 is that the self life of the two supermarkets is different

I will reject H0 if t > 2.22 or if t < -2.22

Using a calculator, I find that t = -0.6143 which is not in the rejection zone therefore we can conclude that the average shelf life of the butter products in the two supermarkets is the same.