## Angelo M. Morales CS20L(12035) Market Basket Analysis written summary

## Antecedents and Consequents

Below are some of the discovered strong association rules with their respective antecedents and consequents:

Antecedents	Consequents
60 TEATIME FAIRY CAKE CASES	PACK OF 72 RETROSPOT CAKE CASES
ALARM CLOCK BAKELIKE PINK	ALARM CLOCK BAKELIKE GREEN
ALARM CLOCK BAKELIKE GREEN	ALARM CLOCK BAKELIKE RED
ALARM CLOCK BAKELIKE RED	ALARM CLOCK BAKELIKE GREEN
ALARM CLOCK BAKELIKE PINK	ALARM CLOCK BAKELIKE RED

## Interpretation of Results

We focused on rules with high confidence ( $\geq 0.5$ ) and high lift ( $\gg 1$ ), indicating strong associations between items. Here are some notable rules:

Rule	Support	Confidence	Lift	Interpretation
ALARM CLOCK GREEN → RED	0.031	0.655	12.88	Green buyers likely to buy Red.
AL ADM OLOGIC	0.004	0.040	40.00	D. H Ph. L.
ALARM CLOCK RED → GREEN	0.031	0.616	12.88	Red buyers likely to buy Green.
PINK → RED	0.022	0.598	11.77	Pink buyers often buy Red too.
PINK → GREEN	0.020	0.541	11.31	Pink buyers may also want Green.
TEATIME CAKE CASES → RETROSPOT	0.021	0.545	8.61	Likely to buy both cake cases.

## Recommendations

Based on the findings, we suggest the following marketing strategies:

- 1. Bundle Color Variants of Alarm Clocks Offer combo deals for Green, Red, and Pink versions.
- 2. Cross-Promotion on Cake Cases Promote Retrospot Cake Cases alongside Teatime Cake Cases.
- 3.Personalized Campaigns Use purchase data to recommend other clock colors via ads or emails.