Problem 3: A few interesting observations in the given domain

Observations in the ANC dataset

- Why do cash payments occur in the beginning of the semester (First two-three weeks of August)?
  Ans. Possibly, the issue of ID cards takes a few weeks. Thus cash payments are the only way to pay in ANC. We clustered the data using a similarity function based on the date of purchase and customer segment.
- Why is sale of ice-creams and cold items, very low in December?
  Ans. Owing to the winter season. We plotted the sale of ice-creams with respect to the date of sale and found this.
- Why are Handy (take-away) food items are prefered in December?
  Ans. One possible explanation could be that students would be busy preparing for final examinations). We plotted all items with respect to date of purchase and saw this trend.
- Why is naan popular in December, although it is a low rated item?
  Ans. In December, there is a very high sale of naan during the night *(indicating that people want to do dinner after coming from Library / IPC)*
- Also, sale of "heavy" items like naan and curry is more, indicating people come to have dinner to ANC. Again, this was obtained from the plot of items versus date of purchase.