Your Task is to implement the algorithm assigned to you using any of the following languages (C#, C++, python, or Java). You will be asked to :

1. Read the transactions table from an Excel file.
2. Handle both vertical and horizontal data formats.
3. Generate all the frequent item sets.
4. Represent the frequent items in the form of association rules.
5. Extract the strong rules.
6. Calculate the dependencies between the items (lift).
7. Run your algorithm using different minimum support and confidence values.
8. Generate all the possible frequent item sets (L1, L2, ….LK).

Attached here is a sample of the files we **may** use during the task delivery( One with a horizontal data format and one with a vertical format).

Kindly note the following:

1. Your delivery will be the week starting 2/12/2023, the schedule will be announced soon.
2. Your projects will be checked for plagiarism, in case of cheating all the teams will be graded **Zero**.
3. A maximum of two students will attend the delivery on behalf of the team.