## 2. ASSOCIATION RULE MINING

| 710            | ITEMS    |
|----------------|----------|
| t <sub>1</sub> | $C_1A,D$ |
| tz             | AB       |
| tz             | C,A,B    |
| th             | C, D, E  |
| t5             | A,E      |
| to             | CIAIB    |
| _ tr           | C,D      |
| _ t8           | 4 ,B     |
|                |          |

A = Apple
B = BEER
C = CHIPS
D = DIAPERS

DETERMINE FOR THESE TRANSACTIONS THE FREQUENT MENSETS WITH MINIMUM SUPPORT. OF 25%. USE THE APRIORI ALGORITHM.

| C <sub>1</sub> |         |
|----------------|---------|
| ITEMSET        | SUPPORT |
| {A}            | 6/8     |
| lB3            | 4/8     |
| €c 3           | 5/8     |
| {D}            | 3/8     |
| {E}            | 2/8     |

L1 = C1

| C2      |   |
|---------|---|
| ITEHSET | SUPPORT   |
| {AB.}   | 4/8   |
| 1A,C3   | 3/8   |
| YA, D.J | 11/8///   |
| 14) EV  | 18  |
| [Bic]   | 2/8   |
| YB,DI   | 119/8/1/11  |
| VB,EJ   | 3/8   |
| 16,01   | 11/8/1  |
| (D, E)  | 1/8/1   |
| (1)     | n) other passes, and a second passes are a second passes. |

| C3<br>ITEMS | SUPPORT | 1 Lz |
|-------------|---------|------|
| {A,B,C}     | 2/8     | YES  |
| {A,B,D}     |         | NO   |
| {A,C,D9     |         | NO   |
| {B,C,D}     |         | NO   |

| /,       |         |
|----------|---------|
| L3 ITEMS | SUPPORT |
| d A,B,C3 | 4/8     |
| (41212)  |         |

| I TEMSET | SUPPORT |
|----------|---------|
| LA189    | 4/8     |
| fA,C3    | 3/8     |
| {B, c}   | 2/8     |
| fc,04    | 3/8     |