

Quiz Arfan Shah

Egg = E = 4

Milk = M = 9

Bread = Br = 10

Butter = Bu = 10

Ketchup = K = 3

Honey = H = 5

Cookies = C = 4

Br = 10

Bu = 10

M = 9

H = 5

E = 4

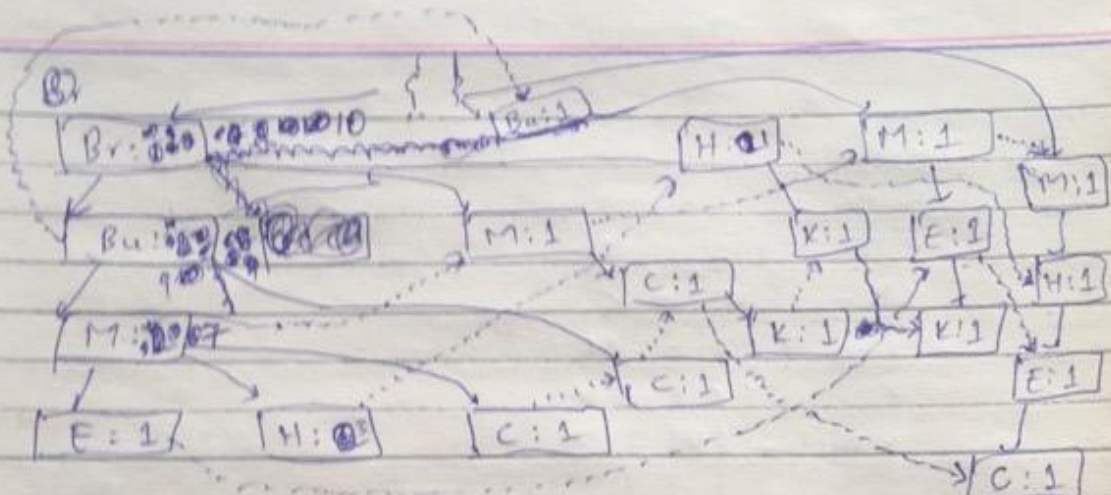
C = 4

K = 3

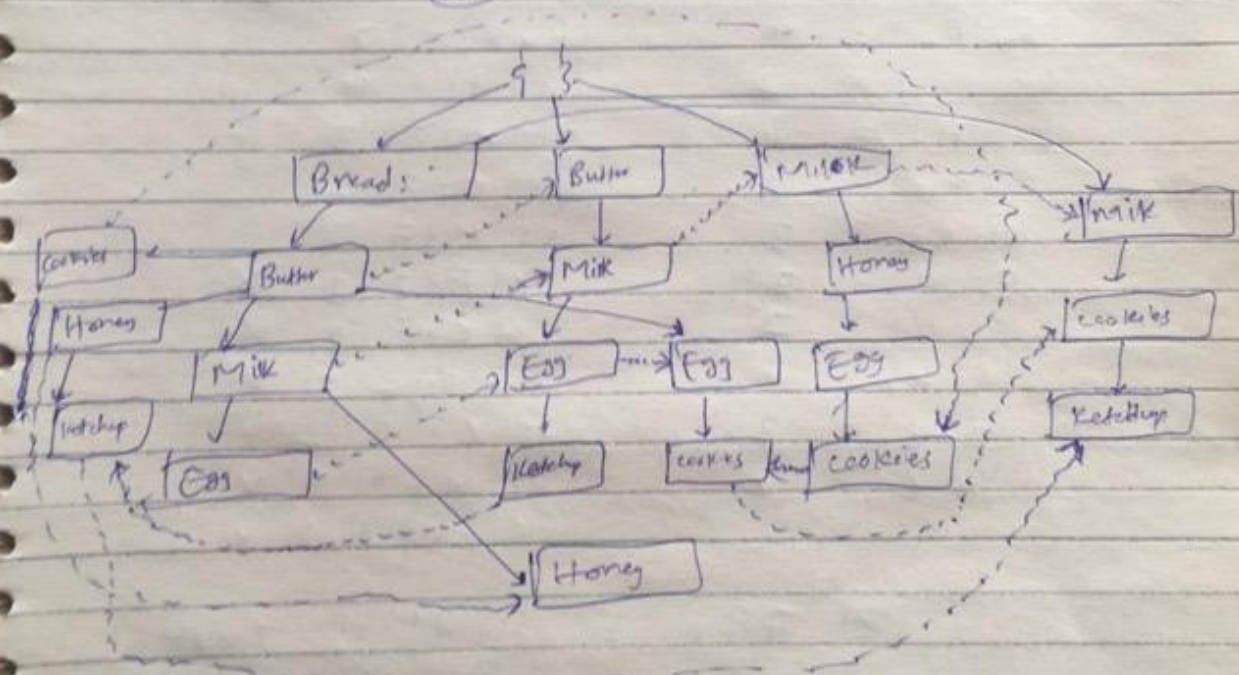
In descending order.

- 1 Bread, Butter, Milk, Egg ✓ ✓
- 2 Butter, Milk, Egg, Ketchup ✓ ✓
- 3 Bread, Butter, Honey, Ketchup ✓ ✓
- 4 Bread, Butter, Milk ✓ ✓
- 5 Bread, Butter, Cookies ✓ ✓
- 6 Bread, Butter, Milk, ~~Cookies~~ Honey ✓ ✓
- 7 Milk, Honey, Egg, Cookies ✓ ✓
- 8 Bread, Butter, Milk, Honey ✓ ✓
- 9 Bread, Butter, Egg, Cookies ✓ ✓
- 10 Bread, Butter, Milk ✓ ✓
- 11 Bread, Milk, Cookies, Ketchup ✓ ✓
- 12 Bread, Butter, Milk, Honey ✓ ✓

Agam Shah



OR



Arfan Shah

Use Apriori algorithm

Take 1 item,

$$\text{Bread (Br)} = 10$$

$$\text{Butter (Bu)} = 10$$

$$\text{Milk (M)} = 9$$

$$\text{Honey (H)} = 5$$

$$\text{Egg (E)} = 4$$

$$\text{Cookies (C)} = 4$$

$$\text{Ketchup (K)} = 3$$

$$7C_2 = \frac{7!}{5! 2!} = \frac{7 \times 6}{2} = 21$$

$$\{Br, Bu\} = 9$$

$$\{Br, M\} = 7$$

$$\{Br, H\} = 4$$

$$\{Br, E\} = 2$$

$$\{Br, C\} = 3$$

$$\{Br, K\} = 2$$

$$\{Bu, M\} = 7$$

$$\{Bu, H\} = 4$$

$$\{Bu, E\} = 3$$

$$\{Bu, C\} = 2$$

$$\{Bu, K\} = 2$$

$$\{M, H\} = 4$$

$$\{M, E\} = 3$$

$$\{M, C\} = 2$$

$$\{M, K\} = 2$$

$$\{H, E\} = 1 \quad X$$

$$\{H, C\} = 1 \quad X$$

$$\{H, K\} = 1 \quad X$$

$$\{E, C\} = 2$$

$$\{E, K\} = 1 \quad X$$

$$\{C, K\} = 1 \quad X$$

$$7C_3 = \frac{7!}{4! 3!} = \frac{7 \times 6 \times 5}{2 \times 1} = 35 \text{ Combinations}$$

Arham Shah

$\{Br, Bu, M, H, E, C, K\}$

$\{Br Bu M\} =$

$\{Br Bu H\} =$

$\{Br Bu E\} =$

$\{Br Bu C\} =$

$\{Br Bu K\} =$

$\{Br M H\} =$

$\{Br M E\} =$

$\{Br M C\} =$

$\{Br M K\} =$

$\{Br H E\} =$

$\{Br H C\} =$

$\{Br H K\} =$

$\{Br E C\} =$

$\{Br E K\} =$

$\{Br C K\} =$

$\{Bu M H\} =$

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$\{M H E\} =$

$\{M H C\} =$

$\{M H K\} =$

$\{M E C\} =$

$\{M E K\} =$

$\{M C K\} =$

$\{H E C\} =$

$\{H E K\} =$

$\{H C K\} =$

$\{E C K\} =$