Minimum Support = 50%
Minimum Confidence = 70%

Itemset ={ Bread, Chicken, Butter, Milk, Toast}

Transaction ID	Items
100	{Bread, Butter, Milk}
200	{Chicken, Butter, Toast}
300	{Bread, Chicken, Butter, Toast}
400	{Chicken, Toast}

Item	Support
Bread	**2 /4 = 0.5 = 50%**
Chicken	**3 /4 = 0.5 = 75%**
Butter	**3 /4 = 0.75 = 75%**
Milk	**1/4 = 0.25 = 25%**
Toast	**3/4 = 0.75 = 75%**

Itemset = { Bread, Chicken , Butter, Toast}

Item	Support
{Bread, Chicken}	**¼ = 0.25 =25%**
{Bread, Butter}	**2/4 =0.50 = 50%**
{Bread, Toast}	**¼ = 0.25 = 25%**
{Chicken, Butter}	**2/4 = 0.50 = 50 %**
{Chicken, Toast}	**¾ = 0.75 = 75%**
{Butter, Toast}	**2/4 = 0.50 = 50%**

Itemset = ({Bread, Butter}, {Chicken, Butter} , {Chicken, Toast}, {Butter, Toast})

Item	Support
{Bread, Butter, Toast}	1/ 4 = 0.25 = 25%
{Chicken, Butter, Toast}	2/4 =0.50 = 50 %
{Bread, Butter, Chicken}	¼ = 0.25 = 25%

Minimum Support = 50%
Minimum Confidence = 70%

Final Resultant Set based on Support = {Chicken, Butter, Toast}

Rules

1. (Chicken & Butter) - > Toast 2 (50%)

2. (Butter & Toast) -> Chicken 2 (50%)

3. (Chicken & Toast) -> Butter 2 (50%)

4. Chicken - > (Butter & Toast) 2 (50%)

5. Toast -> (Chicken & Butter) 2 (50%)

6. Butter -> (Chicken & Toast) 2 (50%)

Confidence = S(A U B).count / S(A).count

1. (Chicken & Butter) - > Toast 2 (50%)

S((Chicken &Butter) U (Toast))/ S(Chicken & Butter)

=2 / 2 = 1 = **100%**

2. . (Butter & Toast) -> Chicken

Confidence = S(A U B).count / S(A).count

S((Butter & Toast) U Chicken)) /S(Butter & Toast)

=2 / 2 = 1 = **100%**

3. (Chicken & Toast) -> Butter 2 (50%)

Confidence = S(A U B).count / S(A).count

S((Chicken & Toast) U (Butter))/S(Chicken & Toast)

=2/3 = 0.666 = **67%**

4. Chicken - > (Butter & Toast) 2 (50%)

Confidence = S(A U B).count / S(A).count

S((Chicken) U (Butter & Toast))/S(Chicken)

=2/3 = 0.666 = **67%**

Minimum Support = 50%
Minimum Confidence = 70%

5.   Toast -> (Chicken & Butter)   2   (50%)

Confidence = S(A U B).count / S(A).count

S((Toast) U (Chicken & Butter))/S(Toast)

=2/3 = 0.666 = **67%**

6.   Butter -> (Chicken & Toast)   2   (50%)

Confidence = S(A U B).count / S(A).count

S((Butter) U (Chicken & Toast))/S(Butter)

=2/3 = 0.666 = **67%**

Final Associated Items rules are

1 .   (Chicken & Butter)   - > Toast   2   (50%)

2.   (Butter & Toast) -> Chicken   2   (50%)