

Since minimum support of 25% is required and there are eight transactions, any item set generated needs exist in at least two transactions (i.e. 25% of eight).

Step1: From transaction table, generate all item sets with one element in it

Step 2: Identify item sets that satisfy the support requirement  
|

Step 3: Using the remaining item sets, generate all possible item sets which contain one more item than existing itemset

Step 4: Repeat step 2

---

### Step 1

I1    6  
I2    4  
I3    2  
I4    5  
I5    5

Step 2 (no item sets eliminated)

### Step 3

I1, I2    4  
I1, I3    1  
I1, I4    4  
I1, I5    4  
I2, I3    1  
I2, I4    3  
I2, I5    3  
I3, I4    1  
I3, I5    2  
I4, I5    3

### Step 2

I1, I2    4  
I1, I4    4  
I1, I5    4  
I2, I4    3  
I2, I5    3  
I3, I5    2  
I4, I5    3

### Step 3

I1, I2, I4    2  
I1, I2, I5    3  
I1, I4, I5    3  
I2, I4, I5    2

### Step 2

I1, I2, I4, I5    2

We stop at this stage as there is only one five element transaction and it won't get 25% support