# Lesson 2 Quiz

4 questions

1/1 points

1. If we know the support of itemset {*a*, *b*} is 10, which of the following numbers are the possible supports of itemset {*a*, *b*, *c*}? Select all that apply.

* 11
* **9**
* **10**

1  
point

2. If we know the support of itemset {*a*} is 50 and the support of itemset {*a*, *b*, *c*} is 30, which of the following numbers are the possible supports of itemset {*a*, *b*}? Select all that apply.

* **10**
* 5
* 50
* 100
* **30**

1  
point

3. Considering the Apriori algorithm, assume we have obtained all size-2 (i.e., containing 2 items, e.g. {A, B}) frequent itemsets. They are {A, B}, {A, C}, {A, D}, {B, C}, {B, E}, and {C, E}. In the following size-3 itemsets, which of them should be considered, i.e., have potential to be size-3 frequent itemsets? Select all that apply.

* {A, B, D}
* {A, C, D}
* **{B, C, E}**
* {A, B, C}

1/1 points

4.

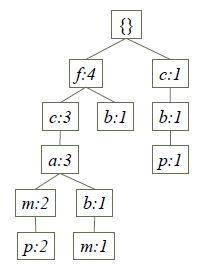


Figure 1: FP-Tree

Given the FP-tree as shown in Figure 1, how many transactions do we have in total?

1. 4
2. **5**
3. 3
4. 1
5. 2

1/1 points

5. If we know the support of itemset {*a*} is 50 and the support of itemset {*a*, *b*, *c*} is 10, which of the following numbers are the possible supports of itemset {*a*, *b*}? Select all that apply.

* 5
* **10**
* 100
* **50**
* **30**

6. Considering the Apriori algorithm, assume we have 5 items (A to E) in total. In the 1st scan, we find out **all** frequent items A, B, C, and E. How many size-2 (i.e., containing 2 items, e.g. A, B) itemsets should be considered in the 2nd scan, i.e., have potential to be size-2 frequent itemsets? Select all that apply.

1. 10
2. 25
3. 4
4. 6

7.

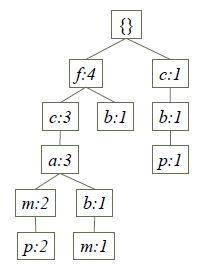


Figure 1: FP-Tree

Given the FP-tree as shown Figure 1, which of the following choices is in the *f*-conditional database? Select all that apply.

* {*c*, *a*, *b*, *m*} : 1
* {*c*, *b*, *p*} : 1
* {*b*} : 1
* {*c*, *a*, *m*, *p*} : 2