COMP4433 Quiz 2

Deadline to submit your answers: 3:30pm 17 Oct 2023

1. Suppose we add more records (with arbitrary attribute values) to the Buys_Computer dataset on page 12 of the classification slides, what is the maximum depth of the decision tree to be constructed? (Pick the best answer) □ ♦	
depends on the number of records in the dataset	
○ 2	
Because there are 4 attributes in the dataset!	
5 is also counted as correct if the leaf nodes are counted as a level.	
None of the above	
2. With respect to the classification problem of Buys_Computer exemplified by the dataset on page 12 of the classification slides, what is the maximum number of leaf nodes to be constructed? (Pick the best answer) □ ⊘	
As the 4 attributes have 3, 3, 2 and 2 attribute values respectively, the maximum number of leaf nodes should be	
$\bigcirc 6 \qquad 3x3x2x2=36.$	
<u> </u>	
O 2	
None of the above	
3. Which of the following statements about decision tree (DT) is true? (Pick the best answer) \square	
DT cannot be used for problems with more than 2 classes DT can be used to solve multi-class problems	
When a leaf node comes up with a tie distribution (e.g., ended, DT can output an undetermined classification.	50-50) when
All of the above are false It is possible to generate a null DT. When the purity of the given dataset (full dataset) is perfect, i.e., information value is zero. There	
None of the above is no need to create a root node.	
Both the second and third answers are correct and "none of the above" indicates	

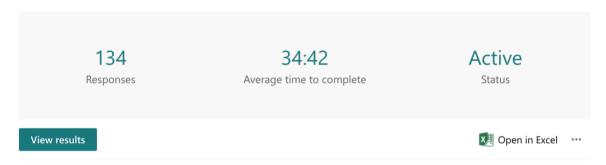
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that there is no such answer. All of selecting the second, third and last option will

be considered as correct.

Some statistics for your reference:

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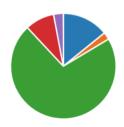


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depends on the number of reco... 19 2 3 4 96 5 12

More Details

None of the above



2. With respect to the classification problem of Buys_Computer exemplified by the dataset on page 12 of the classification slides, what is the maximum number of leaf nodes to be constructed? (Pick the best answer)



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3. Which of the following statements about decision tree (DT) is true? (Pick the best answer)



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