1. What percentage of the predictions on sample_validation_data did decision_tree_model get correct? 1 point

- ○ 25%
- ◉ 50%
- ○ 75%
- ○ 100%

2. Which loan has the highest probability of being classified as a safe loan? 1 point

- ○ First
- ○ Second
- ○ Third
- ◉ Fourth

3. Notice that the probability preditions are the exact same for the 2nd and 3rd loans. Why would this happen? 1 point

- ◉ During tree traversal both examples fall into the same leaf node.
- ○ This can only happen with sheer coincidence.

4. What is the accuracy of decision_tree_model on the validation set, rounded to the nearest .01 (e.g. 0.76)? 1 point

0.64

5. How does the performance of big_model on the validation set compare to decision_tree_model on the validation set? Is this a sign of overfitting? 1 point

- ○ big_model has higher accuracy on the validation set than decision_tree_model. This is overfitting.
- ○ big_model has higher accuracy on the validation set than decision_tree_model. This is not overfitting.
- ◉ big_model has lower accuracy on the validation set than decision_tree_model. This is overfitting.
- ○ big_model has lower accuracy on the validation set than decision_tree_model. This is not overfitting.

6. Let us assume that each mistake costs money: 1 point

- Assume a cost of $10,000 per false negative.

- Assume a cost of $20,000 per false positive.

  What is the total cost of mistakes made by decision_tree_model on validation_data? Please enter your answer as a plain integer, without the dollar sign or the comma separator, e.g. 3002000.

  50280000