Trans-American Airlines

You have been hired by Trans-American Airlines (TAA) as a professional in business analytics. TAA's management has recently noticed that customers are highly dissatisfied with TAA's customer service centers. In response, TAA has launched a series of initiatives to heal the relationship with its customers and identify the main causes of discontent. Several of them consist of listening more to customers through informal channels, such as Facebook and Twitter.

You were hired to analyze Twitter data and detect when a customer has problems with TAA's customer service centers. Each day, the top 20 tweets with the highest probability of being related to customer service issues should be sent directly to the managers of the customer service centers. This initiative has several objectives: (1) identify causes of dissatisfaction, (2) follow up on the problems, and (3) take corrective actions with the customer.

Since TAA is tagged in around 1,000 tweets each day, you proposed to analyze the text of the tweets using data mining models to automate this task. To do this, you asked your assistant to review 14,640 tweets (one by one!) and tag them according to sentiment (positive, neutral, negative), and if negative, indicate the reason why he considered it to be negative. The tweets labeled "Customer Service Issue" are the ones he considered to be related to customer service centers.

Assignment:

1. **How would you use the text of the tweets to identify which ones are related to customer service centers?**