The Airports case study for section 1

Data file

tsa_claims1.csv

Scenario

You are an analyst employed by the U.S. Transportation Security Administration (TSA). Your boss has asked you to produce a report that answers the following questions about insurance claims against airports in the U.S.

Questions

What is the most common type of insurance claim?

Which claim site within the airport are claims most commonly filed for?

What type of claim is made most at each claim site? *Hint:* You can group by multiple columns.

What is the median claim amount?

What is the overall claim approval rate for the entire U.S.? *Hint:* You can get the number of claims for each status add then add a column that uses the sum() function to calculate the total number of claims.

Instructions

1. Create a RMarkdown file for this case study.
2. Use the read_csv() function to read the data file into a variable.

Rename columns and explain why you named them the way you did.

Create a comment for the question.

If necessary, perform additional cleaning or preparation for the question.

Display the data that answers the question.

The Airports case study for section 2

Data files

tsa_claims2.csv

Scenario

Your boss liked your previous report so much he wants you to expand on it by completing the specified tasks and answering some additional questions!

Tasks and questions

Read the data from the tsa_claims2.csv file, not the tsa_claims1.csv file.

Clean the data:

- Improve the column names by removing the spaces from them.
- Drop any rows that contain NA values.
- Store the date columns with the Date type.
- Convert the ClaimAmount and CloseAmount columns to the double type. (*Hint*: You will first need to remove the dollar signs and semicolons from the character strings.)

Answer the following questions:

- If a claim is approved, what percent of the claim amount did the airports pay on average? If the is claim is settled, what percent of the amount did the airports pay on average?
- What are the five airports with the most claims?
- Has the average amount paid out by airports increased or decreased over time?

Instructions

Create a RMarkdown file that answers the questions shown above.

Whenever possible, reuse code from the script for section 1 and improve it to reflect what you've learned in section 2.

Whenever it makes sense, use a plot to answer a question.

Use comments to indicate which parts of your script perform tasks and answer questions. If it's helpful, use comments to state your answers to questions.