edX

Reflect on the Question

| Reflect on the Question | Analyze the Data | Draw Conclusions |

Austin Animal Shelter Data

Have you ever been curious about how long it takes for an animal to be adopted? To investigate questions like this, we contacted the Austin Animal Shelter and they provided us with information about 473 cats and dogs. Included in the dataset are information about how the animals arrived at the shelter, their sex, breed, age, weight, and the number of days spent in the shelter. The data is contained in *AnimalData.csv* and each variable is described in the codebook file.

problem

2/2 points (graded)
Review of Descriptive Statistics

1a. In this lab you will use descriptive statistics to answer a question of interest. Let's start by remembering why we calculate descriptive statistics.

Descriptive statistics can tell us:

- ○ whether two variables are independent.

- ○ whether we have a categorical or quantitative variable.

- ○ how many values in a population are significant outliers.

- ⦿ what the distribution of a variable looks like. ✔

1b. Which of the following are examples of descriptive statistics?

- ○ The number of cases in a dataset that have missing values.

- ⦿ The mean and standard deviation of a distribution. ✔

- ○ The variable types that are in a dataset.

- ○ The columns in a dataset.

Submit	You have used 1 of 2 attempts

problem

1/1 point (graded)
Lab Preparation

In this lab you will be working with data from the Austin Animal Shelter.

1. Open RStudio. Make sure you've installed the **current version** of the SDSFoundations package.
2. Type `library(SDSFoundations)` This will automatically load the data for the labs.
3. Type `animaldata <- AnimalData` This will assign the data to your Workspace.

Alternatively, you can use follow the steps in the "Importing a Data Frame" R tutorial video, and use the AnimalData.csv file. (Right-click and "Save As.") Make sure to **name** the dataframe "animaldata" when importing.

1. Open RStudio.
2. Click on "Import Dataset" button at the top of the workspace window. Choose *"from text file."*
3. Click on the location of the AnimalData.csv file you just downloaded.
4. Click on the AnimalData.csv file. Then, click Upload.

Feel free to use the script from the week's PreLab, which you can modify for use in this Lab.

2. One of the following questions will be answered in this lab using descriptive statistics. Select the question that can be answered with descriptive statistics.

○ Which animals were adopted but should have been returned to the owner?

○ Does the age of an animal determine whether or not it will be adopted?

◉ How much do adult cats and dogs at the shelter weigh? ✔

○ Does being in the shelter make dogs more aggressive?

| Submit | You have used 1 of 2 attempts |