### Feedback — Unit 1 Lab 1: Introduction to Data

Help

You submitted this homework on **Sun 16 Mar 2014 12:19 PM PDT**. You got a score of **8.00** out of **10.00**. However, you will not get credit for it, since it was submitted past the deadline.

### **INSTRUCTIONS:** Read these first before you get started.

Lab instructions can be found in this document.

(You may also find the document at this address:

https://d396qusza40orc.cloudfront.net/statistics%2FDocuments%2FLabs%2FLab Unit1 Lab1.pdf.)

As you go through the contents of the lab instructions document you will encounter multiple choice questions, make sure to submit your answers to those questions here to get credit.

You may attempt this lab as many times as you like (well, Coursera limits number of attempts at 100, but chances are you won't need that many!).

### Notes:

- To complete the lab in RStudio, you will first need to make sure that you have **both** R and RStudio installed. You can download R at http://cran.r-project.org, and RStudio at http://www.rstudio.com/. See this video for step-by-step installation instructions if needed).
- If you prefer to complete the exercises in the interactive web-based DataCamp environment, click here.

## Question 1 How many cases and how many variables are there in this data set? Your Answer Score Explanation ●20,000 cases; 9 variables ✓ 1.00 ●20,000 cases; 10 variables ● 10 cases; 20,000 variables ■10 cases; 20,000 variables 1.00 / 1.00

### **Question 2**

What type of variable is genhlth?

Your Answer		Score	Explanation
⊚categorical, ordinal	~	1.00	
categorical (not ordinal)			
Onumerical, continuous			
onumerical, discrete			
Total		1.00 / 1.00	

### What type of variable is weight? Your Answer Score Explanation categorical (not ordinal) categorical, ordinal numerical, discrete numerical, continuous Total 0.00 / 1.00

### Question 4 What type of variable is smoke100? Your Answer Score Explanation categorical, ordinal numerical, discrete categorical (not ordinal)

numerical, continuous	×	0.00
Total		0.00 / 1.00

### **Question 5**

Create a numerical summary for gender. How many males are in the sample?

Score	Explanation
1.00	
1.00 / 1.00	
	1.00

### **Question 6**

Compute the relative frequency distribution of genhlth. What proportion of the sample reports being in excellent health? Choose the closest answer.

Your Answer		Score	Explanation
0.15			
●0.23	~	1.00	
0.30			
0.51			
Total		1.00 / 1.00	

### **Question 7**

What does the mosaic plot reveal about smoking habits and gender?

Your Answer		Score	Explanation
• The mosaic plot shows that males are more likely to smoke than females.	~	1.00	
○The mosaic plot shows that males are less likely to smoke than females.			
○The mosaic plot shows that males are just as likely to smoke than females.			
Total		1.00 /	
		1.00	

### **Question 8**

How many observations are in the subset under23 and smoke that you created in the previous exercise, i.e. how many people in the sample are under the age of 23 and have smoked at least 100 cigarettes in their lifetime?

Your Answer		Score	Explanation
<b>620</b>	~	1.00	
○771			
○7,244			
○10,436			
<b>17,951</b>			
Total		1.00 / 1.00	

### **Question 9**

Which of the following is false based on the box plot of BMI vs. general health?

Your Answer	Score	Explanation
Your Answer	Score	Explanation

Among people with excellent health, there are some with

unusually low BMIs compared to the rest of the group.	
The IQR increases slightly as general health status declines (from excellent to poor).	
The median BMI is roughly 25 for all general health categories, and there is a slight increase in median BMI as general health status declines (from excellent to poor).	
• The distributions of BMIs within each health status group is left skewed.	✔ 1.00
Total	1.00 / 1.00

### **Question 10**

Based on the plot you made in the previous exercise, which of the following is true about the relationship between weight and desired weight?

Your Answer		Score	Explanation
moderately weak negative linear association			
moderately weak positive linear association			
moderately strong positive linear association	~	1.00	
moderately strong negative linear association			
Total		1.00 / 1.00	

### **Question 11**

The following questions are not graded, but your feedback is very much appreciated and immensely useful for the development of the course.

This lab covered material that is covered in the class.

Your Answer	Score	Explanation

Strongly Disagree		
Disagree		
Neutral		
Agree		
Strongly Agree		
Total	0.00 / 0.00	

### **Question 12** The lab improved my understanding of these topics. Your Answer Score **Explanation** Strongly Disagree Olisagree Neutral Agree Strongly Agree Total 0.00 / 0.00

The instructions were clear and it was easy to understand what was wanted.

Your Answer	Score	Explanation
Strongly Disagree		
○ Disagree		
○ Neutral		
○Agree		

**Question 13** 

Strongly Agree	
Total	0.00 / 0.00

# Question 14 The data were relevant and interesting to me. Your Answer Score Explanation Strongly Disagree Disagree Neutral Agree Strongly Agree Total 0.00 / 0.00

## The length of time took to complete lab. Your Answer Score Explanation Less than 30 minutes Between 30 minutes and 1 hour Between 1 hour and 2 hours More than 2 hours Total 0.00 / 0.00