edX

Conduct the Analysis

Reflect on the Question ✓   **Analyze the Data**   Draw Conclusions

Primary Research Question

For artists age 30 or older, do female artists play different kinds of music on Austin City Limits than male artists?
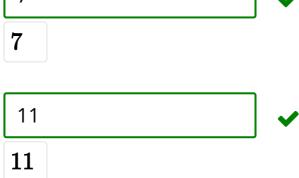
Conduct the Analysis in R

1. Type or copy the script from the Prepare for the Analysis section into the Script window of R.
2. Select the portion of the code you wish to run, then press "ctrl+ enter."
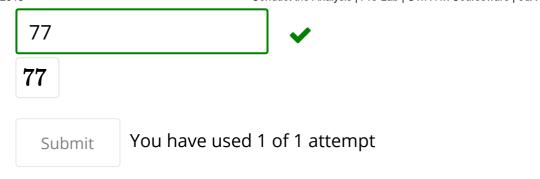3. Output can be found in the Console window.

problem

6/6 points (graded)
1a. How many male artists are in the 30+ year old artist subset of the Austin City Limits dataset?

77

77

1b. How many female artists are in the 30+ year old artist subset of the Austin City Limits dataset?

25

25

2a. To determine the proportion of jazz performers that were male, you would divide _____ by _____. (Enter responses in the order listed in the quesiton.)

7

7

11

11

2b. To determine the proportion of males that performed jazz, you would divide _____ by _____. (Enter responses in the order listed in the quesiton.)

7

7

77

77

| Submit | You have used 1 of 1 attempt |

---

problem

2/2 points (graded)

3a. Which table should you look at to determine how many artists performed rock/folk/indie music: genre or gender?

genre ✓

3b. How many artists performed rock/folk/indie music?

61 ✓

61

| Submit | You have used 1 of 1 attempt |

---

problem

2/2 points (graded)

4a. Which of these lines of code provides the probability that a randomly selected artist from the dataset performed rock/folk/indie music?

prop.table(genre) ▾ ✓

4b. What is the probability that a randomly selected artist from the
dataset performed rock/folk/indie music?

| 0.598 ▾ | ✔

| Submit | You have used 1 of 1 attempt

problem

2/2 points (graded)
5a. Which of these lines of code provides the probability that a
randomly selected female artist performed rock/folk/indie music?

| prop.table(twoway,1) ▾ | ✔

5b. What is the probability that a randomly selected female artist
performed rock/folk/indie music?

| 0.320 ▾ | ✔

| Submit | You have used 1 of 1 attempt

problem

1/1 point (graded)
6. For genre and gender to be independent, which of the following
statements must be true?

○ P(rock)*P(female) = P(rock) + P(female)

○ P(rock) = P(rock|female) ✔

○ P(female) = P(rock)/P(female)

○ P(rock)=P(female/rock)

Submit	You have used 1 of 1 attempt