



Week 1 Quiz

[Back to Week 1](#)

4/5 points
earned (80%)

Quiz passed!



1 / 1
points

1.

The American Community Survey distributes downloadable data about United States communities. Download the 2006 microdata survey about housing for the state of Idaho using `download.file()` from here:

<https://d396qusza40orc.cloudfront.net/getdata%2Fdata%2Fss06hid.csv>

and load the data into R. The code book, describing the variable names is here:

<https://d396qusza40orc.cloudfront.net/getdata%2Fdata%2FPUMSDict06.pdf>

How many properties are worth \$1,000,000 or more?



31



53



Correct



2076



24



1 / 1
points

2.

Use the data you loaded from Question 1. Consider the variable `FES` in the code book. Which of the "tidy data" principles does this variable violate?



Each tidy data table contains information about only one type of observation.



Each variable in a tidy data set has been transformed to be interpretable.





Tidy data has one variable per column.



Correct



Tidy data has one observation per row.



1 / 1
points

3.

Download the Excel spreadsheet on Natural Gas Acquisition Program here:

https://d396qusza40orc.cloudfront.net/getdata%2Fdata%2FDATA.gov_NGAP.xlsx

Read rows 18-23 and columns 7-15 into R and assign the result to a variable called:

```
1 dat
```

What is the value of:

```
1 sum(dat$Zip*dat$Ext, na.rm=T)
```

(original data source: <http://catalog.data.gov/dataset/natural-gas-acquisition-program>)



338924



36534720



Correct



0



184585



1 / 1
points

4.

Read the XML data on Baltimore restaurants from here:


<https://d396qusza40orc.cloudfront.net/getdata%2Fdata%2Frestaurants.xml>

How many restaurants have zipcode 21231?



28



 130 127**Correct** 1000 / 1
points

5.

The American Community Survey distributes downloadable data about United States communities. Download the 2006 microdata survey about housing for the state of Idaho using `download.file()` from here:

<https://d396qusza40orc.cloudfront.net/getdata%2Fdata%2Fs06pid.csv>

using the `fread()` command load the data into an R object

```
1 DT
```

The following are ways to calculate the average value of the variable

```
1 pwgtp15
```

broken down by sex. Using the `data.table` package, which will deliver the fastest user time?

- ☐ `tapply(DT$pwgtp15,DT$SEX,mean)`
- ☐ `rowMeans(DT)[DT$SEX==1]; rowMeans(DT)[DT$SEX==2]`
- ☒ `sapply(split(DT$pwgtp15,DT$SEX),mean)`

**This should not be selected**

- ☐ `DT[,mean(pwgtp15),by=SEX]`
- ☐ `mean(DT[DT$SEX==1,]$pwgtp15); mean(DT[DT$SEX==2,]$pwgtp15)`
- ☐ `mean(DT$pwgtp15,by=DT$SEX)`

