

# LAB\_1

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1.
- a. Create a vector called countries which contains the names of 5 countries that you would like to visit some day. (b) Print out the elements of the vector. (c) Print out the 4th element of the vector.

```
countries = c('Spain', 'Sweden', 'Belice', 'Korea', 'Czech republic')
countries
```

```
## [1] "Spain"      "Sweden"     "Belice"     "Korea"
## [5] "Czech republic"
```

```
countries[4]
```

```
## [1] "Korea"
```

2.
- a. Create a vector called nums which contains the numbers 5,6,7,8,9,...,199,200 (consecutive integers) (b) Use the length() function to find the number of numbers in the vector. (c) Use the sum() function to add up all of the values in nums. (d) Use the mean() function to find the average of all of the values in nums. nums

```
nums = c(5:200)
len = length(nums)
total = sum(nums)
average = mean(nums)
```

3.
- a. Create a vector called sleep which contains how many hours of sleep you get on each day of the week (starting with Monday). (b) Create a vector called days which contains the names of the days of the week (starting with Monday). (c) Use the names() function to set the names of the sleep vector to the values of the days vector. (d) Show two different ways to print out the number of hours of sleep you get on a Sunday.

```
sleep = c(7, 7.5, 6, 7, 8, 7, 6)
days = c('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday')
names(sleep) <- days

sleep[1]
```

```
## Monday
##      7
```

```
sleep['Monday']
```

```
## Monday
##      7
```

```
sleep
```

```
##      Monday  Tuesday Wednesday  Thursday    Friday  Saturday    Sunday
##          7.0      7.5       6.0       7.0      8.0       7.0       6.0
```

4.
- Once you make sure all the code works in the R markdown file, knit it to either an HTML or Word file. Then open the knitted file and print it as a PDF file. The name of the file should be Stat123Lab01YourLastName.pdf. Then submit the pdf file to the appropriate Brightspace folder. Note: You can knit the Rmarkdown file directly to a pdf file, but the computer needs to have the Latex software installed. This method is not recommended (and not supported in this course) unless you know what you are doing.