

# Lab 1

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## Question 1

a). Create a vector called countries which contains the names of 5 countries that you would like to visit some day.

```
countries <- c("Germany", "Italy", "Russia", "Spain", "Romania")
```

b). Print out the elements of the vector.

```
countries
```

```
## [1] "Germany" "Italy" "Russia" "Spain" "Romania"
```

c). Print out the 4th element of the vector.

```
countries[4]
```

```
## [1] "Spain"
```

## Question 2

a). Create a vector called nums which contains the numbers 5, 6, 7, 8, 9,..., 199, 200 (consecutive integers)

```
nums <- 5:200
```

b). Use the length() function to find the number of numbers in the vector.

```
length(nums)
```

```
## [1] 196
```

c). Use the sum() function to add up all of the values in nums.

```
sum(nums)
```

```
## [1] 20090
```

d). Use the mean() function to find the average of all of the values in nums.

```
mean(nums)
```

```
## [1] 102.5
```

## Question 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).

```
sleep <- c(8,8,8,8,8,8,8)
```

b). Create a vector called `days` which contains the names of the days of the week (starting with Monday).

```
days <- c("Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday", "Sunday")
```

c). Use the `names()` function to set the names of the `sleep` vector to the values of the `days` vector.

```
names(sleep) <- days
```

d). Show two different ways to print out the number of hours of sleep you get on a Sunday.

```
sleep
```

```
##    Monday    Tuesday Wednesday   Thursday    Friday   Saturday    Sunday
##         8         8         8         8         8         8         8
```

```
print(sleep)
```

```
##    Monday    Tuesday Wednesday   Thursday    Friday   Saturday    Sunday
##         8         8         8         8         8         8         8
```