Assignment1-Q1

2022-09-19

Question 1

Assume that Prof. Steele creates the following list in R to help manage his life:

```
shopping_list <- list(
   Grocery = list(
      Dairy = c("Milk", "Cheese"),
      Meat = c("Chicken", "Sausage", "Bacon"),
      Spices = c("Cinnamon")
),
   Pharmacy = c("Soap", "Toothpaste", "Toilet Paper")
)</pre>
```

a. What objects (or values) are returned by the following lines of R code?

```
shopping_list$Grocery[["Meat"]]
# [1] "Chicken" "Sausage" "Bacon"

shopping_list[[2]][1]
# [1] "Soap"

shopping_list[["Pharmacy"]]
# [1] "Soap" "Toothpaste" "Toilet Paper"

shopping_list[1][[c(1,1,2)]]
# [1] "Cheese"
```

b. Using R code, write statements which yield the following three results:

Result 1:

```
shopping_list["Grocery"]

## $Grocery
## $Grocery$Dairy
## [1] "Milk" "Cheese"

##

## $Grocery$Meat
## [1] "Chicken" "Sausage" "Bacon"

##

## $Grocery$Spices
## [1] "Cinnamon"

Result 2:
shopping_list[["Pharmacy"]][3]
```

```
## [1] "Toilet Paper"
```

Result 3:

```
shopping_list[["Grocery"]]["Meat"]
```

```
## $Meat
## [1] "Chicken" "Sausage" "Bacon"
```