Introduction to R

Exercise 2

The Scenario:

You are an owner of four coffee shops. Your shops sell four items: Americano, Latte, Cupcake and Muffin. By the end of each month, you receive message about the total number of items sold from each store. You wish to aggregate the data and perform some analysis. Let’s try it with R!

Here’s the messages you got:

Central  
Americano: 250  
Latte:85  
Cupcake: 90  
Muffin: 200

East  
Americano:300  
Latte: 250  
Cupcake: 100  
Muffin: 120

West  
Americano: 120  
Latte: 110  
Cupcake: 165  
Muffin: 75

Central  
Americano: 100  
Latte: 97  
Cupcake: 125  
Muffin: 55

1. Create a vector containing the number of items sold for each store. Name them “central”, “west”, “east”, and “north”.
2. Create a matrix containing the number of items sold in each store (like below) and name the matrix “sales”.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | americano | latte | cupcake | muffin |
| central | 100 | 97 | 125 | 55 |
| west | 120 | 110 | 165 | 75 |
| east | 300 | 250 | 100 | 120 |
| north | 250 | 85 | 90 | 200 |

1. Construct a data frame containing “shop”, “americano”, “latte”, “cupcake” and “muffin”. Like below

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| shop | americano | latte | cupcake | muffin |
| central | 300 | 388 | 625 | 330 |
| west | 360 | 440 | 825 | 450 |
| east | 900 | 1000 | 500 | 720 |
| north | 750 | 340 | 450 | 1200 |

1. Remove “americano” and “latte” from your data frame. (remove the entire column)
2. Remove “east” from your data frame. (remove the entire columns)
3. Check the dataset folders and read the following datasets into R, rember to assign them to objects

* *facebookData*
* *HousingData*
* *WorldCupMatches*