

WORKSHEET 4

1. A. The data shows the shoe size, gender and height.

B. code: `size <- cbind(shoe_size1, shoe_size2)`

`size`

`mean(size)`

result: **9.410714**

code: `height <- cbind(height1, height2)`

`height`

`mean(height)`

result: **68.57143**

- C. Is there a relationship between shoe size and height? Why?

Answer: **Yes, there is a relationship between the two. It shows that the taller the person is, the bigger the shoe size.**

- 2.

```

33
34 #2
35 month <- c("March", "April", "January", "November", "January",
36            "September", "October", "September", "November", "August",
37            "January", "November", "November", "February", "May", "August",
38            "July", "December", "August", "August", "September", "November", "February", "April")
39 factor_month <- factor(month)
40 factor_month
41
42 factor_months_vector <- factor_month
43 factor_months_vector
44

```

- 3.

```

>
> summary(factor_month)
  April      August  December  February  January      July      March      May  November  October  September
      2           4           1           2           3           1           1           1           5           1           3
> summary(factor_months_vector)
  April      August  December  February  January      July      March      May  November  October  September
      2           4           1           2           3           1           1           1           5           1           3
> |

```

- 4.

```

48 #4
49 Direction <- c("East", "West", "North")
50 Direction
51 Frequency <- c(1, 4, 3)
52 Frequency
53
54 vec <- data.frame(Direction, Frequency)
55 vec
56 factor_vec <- factor(Direction)
57
58 new_order_data <- factor(factor_vec, levels = c("East", "West", "North"))
59 print(new_order_data)
60

```

5. A.

Code: `e_data <- read.table("import_march.csv", sep="," , header=TRUE, stringsAsFactor=FALSE);`

`e_data`

B.

Code: `View(e_data)`

Result:

```
> 
> e_data <- read.table("import_march.csv", sep="," , header=TRUE, stringsAsFactor=FALSE);
> e_data
  Students Strategy.1 Strategy.2 Strategy.3
1    Male          8         10          8
2          4          8          6
3          0          6          4
4   Female         14          4         15
5          10          2         12
6          6          0          9
> |
```