HW3_Brown

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Problem 3:

a. Sensory data from five operators:

```
#sensory_url <- "https://www2.isye.gatech.edu/~jeffwu/wuhamadabook/data/Sensory.dat"
sensory_table <- read.table("https://www2.isye.gatech.edu/~jeffwu/wuhamadabook/data/Sensory.dat", string
View(sensory_table)

new_sensory <- sensory_table[-c(1),]
view(new_sensory)
sensory_table <- new_sensory[-c(1),]
View(sensory_table)
View(sensory_table)
t<- sensory_table %>% filter(is.na(V6))
View(t)
t<- sensory_table %>% filter(!is.na(V6))
sensory_table_na<- sensory_table %>% filter(is.na(V6))
sensory_table_not_na<- sensory_table %>% filter(!is.na(V6))
sensory_table_na
```

```
##     V1  V2  V3  V4  V5 V6
## 1  4.3 4.5 4.0 5.5 3.3 NA
## 2  4.1 5.3 3.4 5.7 4.7 NA
## 3  4.9 6.3 4.2 5.5 4.9 NA
## 4  6.0 5.9 4.7 6.3 4.6 NA
## 5  3.9 3.0 2.8 2.7 1.3 NA
## 6  1.9 3.9 2.6 4.6 2.2 NA
## 7  7.1 7.9 5.9 7.3 6.1 NA
## 8  6.4 7.1 6.9 7.0 6.7 NA
## 9  5.8 5.7 5.4 6.2 6.5 NA
## 10 5.8 6.0 6.1 7.0 4.9 NA
## 11 3.0 1.8 2.1 4.0 1.7 NA
## 12 2.1 3.3 1.1 3.3 2.1 NA
## 13 1.3 2.4 0.8 1.2 1.3 NA
## 14 0.9 3.1 1.1 1.9 1.6 NA
## 15 3.0 4.5 4.7 4.9 4.6 NA
## 16 4.8 4.8 4.7 4.8 4.3 NA
## 17 9.0 7.7 6.7 9.0 7.9 NA
## 18 8.9 9.2 8.1 9.1 7.6 NA
## 19 5.4 5.0 3.4 4.9 4.6 NA
## 20 2.8 5.2 4.1 3.9 5.5 NA
```

```
sensory_table_not_na
```

```
##    V1  V2  V3  V4  V5  V6
```

```
## 1   1 4.3 4.9 3.3 5.3 4.4
## 2   2 6.0 5.3 4.5 5.9 4.7
## 3   3 2.4 2.5 2.3 3.1 2.4
## 4   4 7.4 8.2 6.4 6.8 6.0
## 5   5 5.7 6.3 5.4 6.1 5.9
## 6   6 2.2 2.4 1.7 3.4 1.7
## 7   7 1.2 1.5 1.2 0.9 0.7
## 8   8 4.2 4.8 4.5 4.6 3.2
## 9   9 8.0 8.6 9.0 9.4 8.8
## 10 10 5.0 4.8 3.9 5.5 3.8
```

b. Gold Medal performance for Olympic Men's Long Jump:

```
gold_url <- "https://www2.isye.gatech.edu/~jeffwu/wuhamadabook/data/LongJumpData.dat"
gold_table <- read.table(gold_url,stringsAsFactors = FALSE, fill = TRUE)
View(gold_table)
non_na_gold <- gold_table[-c(9,10,11,12)]
gold_table <- non_na_gold[-c(1),]
gold_table
```

```
##   V1     V2 V3     V4 V5     V6 V7     V8
## 2 -4 249.75 24 293.13 56 308.25 80 336.25
## 3  0 282.88 28 304.75 60 319.75 84 336.25
## 4  4 289.00 32 300.75 64 317.75 88 343.25
## 5  8 294.50 36 317.31 68 350.50 92 342.50
## 6 12 299.25 48 308.00 72 324.50
## 7 20 281.50 52 298.00 76 328.50
```

c. Brain weight and body weight:

```
brain_url <- "https://www2.isye.gatech.edu/~jeffwu/wuhamadabook/data/BrainandBodyWeight.dat"
brain_table <- read.table(brain_url,stringsAsFactors = FALSE, fill = TRUE)
View(brain_table)
non_na_brain <- brain_table[,-c(7,8,9,10,11,12)]
brain_table <- non_na_brain[-c(1),]
brain_table
```

```
##          V1     V2       V3     V4      V5     V6
## 2     3.385   44.5  521.000  655.0   2.500  12.10
## 3     0.480   15.5    0.785    3.5  55.500 175.00
## 4     1.350    8.1   10.000  115.0 100.000 157.00
## 5   465.000  423.0    3.300   25.6  52.160 440.00
## 6    36.330  119.5    0.200    5.0  10.550 179.50
## 7    27.660  115.0    1.410   17.5   0.550   2.40
## 8    14.830   98.2  529.000  680.0  60.000  81.00
## 9     1.040    5.5  207.000  406.0   3.600  21.00
## 10    4.190   58.0   85.000  325.0   4.288  39.20
## 11    0.425    6.4    0.750   12.3   0.280   1.90
## 12    0.101    4.0   62.000 1320.0   0.075   1.20
## 13    0.920    5.7 6654.000 5712.0   0.122   3.00
## 14    1.000    6.6    3.500    3.9   0.048   0.33
## 15    0.005    0.1    6.800  179.0 192.000 180.00
```

```
## 16    0.060    1.0   35.000   56.0   3.000  25.00
## 17    3.500   10.8    4.050   17.0 160.000 169.00
## 18    2.000   12.3    0.120    1.0   0.900   2.60
## 19    1.700    6.3    0.023    0.4   1.620  11.40
## 20 2547.000 4603.0    0.010    0.3   0.104   2.50
## 21    0.023    0.3    1.400   12.5   4.235  50.40
## 22  187.100  419.0  250.000  490.0
```

d. Triplicate measurements of tomato yield for two varieties of tomatoes:

```
tomato_url <- "https://www2.isye.gatech.edu/~jeffwu/wuhamadabook/data/tomato.dat"
tomato_table <- read.table(tomato_url,fill = TRUE)
View(tomato_table)
non_na_tomato <- tomato_table[-c(1),]
tomato_table <- non_na_tomato
tomato_table
```

```
##                         X10000         X20000         X30000
## PusaEarlyDwarf 8.1,8.6,10.1, 12.7,13.7,11.5 14.4,15.4,13.7
```