

作業(二) 商研一 A09741303 鄭守開

Use the file "classmate.xlsx", and answer the question below by R.

1. Calculate how many males and females in the class.

Males = 20, Females = 23

```
table(gender)
```

```
> # 1. Calculate how many males and females in the class.
> # Males = 20, Females = 23
> table(gender)
gender
  F  M
23 20
```

2. Calculate the mean of males' and females' weight respectively.

mean of males' weight = 71.4

mean of females' weight = 55.26087

```
gender
```

```
male_number<-which(gender=="M")
```

```
male_number
```

```
female_number<-which(gender=="F")
```

```
female_number
```

```
male_weight<-data$weight[male_number]
```

```
male_weight
```

```
mean_male_weight<-sum(male_weight)/length(male_weight)
```

```
mean_male_weight
```

```
female_weight<-data$weight[female_number]
```

```
female_weight
```

```
mean_female_weight<-sum(female_weight)/length(female_weight)
```

```
mean_female_weight
```

```
> # 2. Calculate the mean of males' and females' weight respectively.
> gender
[1] "F" "M" "F" "F" "M" "F" "M" "M" "M" "F" "M" "F" "F" "M" "F" "F" "M" "M" "F" "M" "F" "F" "F" "F" "F" "M" "M" "F"
[31] "F" "M" "M" "M" "M" "F" "M" "M" "F" "F" "F" "M" "M"
>
> male_number<-which(gender=="M")
> male_number
[1] 2 5 7 8 9 11 15 18 19 21 27 28 32 33 34 35 37 38 42 43
>
> female_number<-which(gender=="F")
> female_number
[1] 1 3 4 6 10 12 13 14 16 17 20 22 23 24 25 26 29 30 31 36 39 40 41
>
> male_weight<-data$weight[male_number]
> male_weight
[1] 68 78 63 66 85 81 62 80 75 74 59 73 82 74 71 62 59 67 66 83
> mean_male_weight<-sum(male_weight)/length(male_weight)
> mean_male_weight
[1] 71.4
>
> female_weight<-data$weight[female_number]
> female_weight
[1] 53 49 50 60 55 64 57 55 61 57 61 50 54 52 60 48 58 51 57 58 49 55 57
> mean_female_weight<-sum(female_weight)/length(female_weight)
> mean_female_weight
[1] 55.26087
```