

Name: 黃子瑋

Student ID:410475001

---

Question 1: What was the share of elderly people living in New Taipei City in 1998?

Ans:

6.21%

---

Question 2: What is the data type for variable Year?

Ans:

character

---

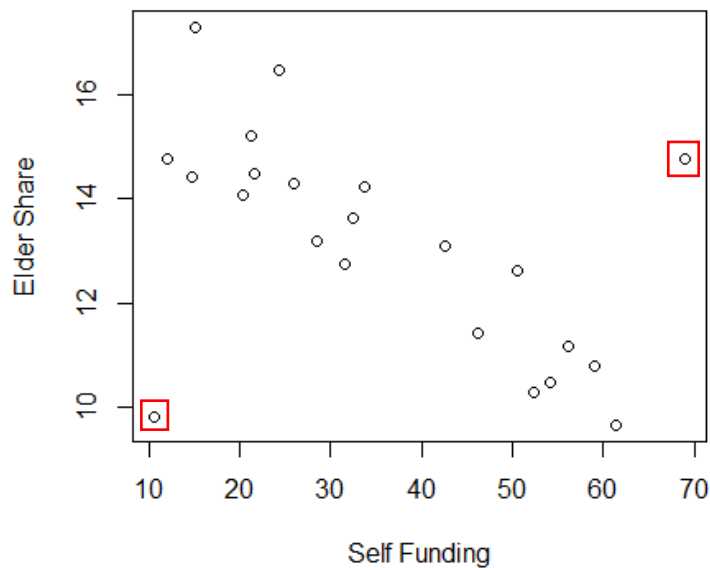
Question 3: how many levels does the factor variable “area” has?

Ans:

6

---

Plot:Self Funding 和 Elder Share 在散布圖中呈現負相關，從肉眼看出有兩個離群值



---

Source Code:

#1

```
library(readxl)
```

```
library(tidyverse)
```

#2

```
setwd(getwd())
```

```
data.frame<-read_excel('counties.xlsx',na='-')
```

#3

```
filter(data.frame,city=='New Taipei City',Year=='1998')
```

```
class(data.frame$Year)
```

#4

```
mutate(data.frame,Year=as.numeric(Year))
```

```
data.frame<-rename(data.frame,year=Year)
```

#5

```
data.frame<-rename(data.frame,area=Area)
```

```
data.frame<-mutate(data.frame,area=factor(area))  
nlevels(data.frame$area)  
#6  
new.data.frame<-filter(data.frame,!city%in%c('Total','Taiwan'))  
#7  
another.data.frame<-filter(new.data.frame,year=='2015')  
#8  
plot(x=another.data.frame$self_funding,y=another.data.frame$elder_share,xlab='Self  
Funding',ylab='Elder Share')
```