

1. 根據課堂「Practice 2：以iris為例」為範本，執行以下小題（須附上程式碼與執行結果）：

a. 請列出花瓣長度介於2~3的所有數值

程式碼：

```
#problem a  
x = iris$Petal.Length  
x[x>2&x<3]
```

執行結果：

```
> #problem a  
> x = iris$Petal.Length  
  
> x[x>2&x<3]  
numeric(0)
```

b. 加總花瓣長度介於2~3的數值

程式碼：

```
#problem b  
location = which(x>2&x<3)  
sum(x[location])
```

執行結果：

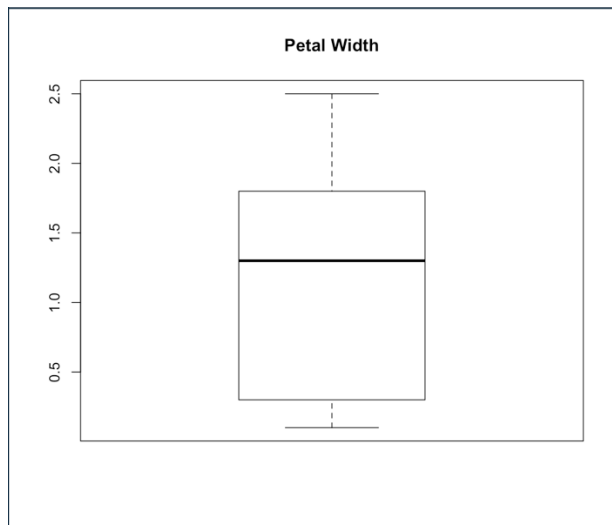
```
> #problem b  
> location = which(x>2&x<3)  
  
> sum(x[location])  
[1] 0
```

c. 繪製花瓣寬度的boxplot、stem-leaf plot

程式碼：

```
#problem c
boxplot(iris$Petal.Width, main = "Petal Width")
stem(iris$Petal.Width)
```

執行結果：



```
> boxplot(iris$Petal.Width, main = "Petal Width")
> stem(iris$Petal.Width)

The decimal point is 1 digit(s) to the left of the |

 1 | 00000
 2 | 00000000000000000000000000000000
 3 | 0000000
 4 | 0000000
 5 | 0
 6 | 0
 7 |
 8 |
 9 |
10 | 0000000
11 | 000
12 | 00000
13 | 00000000000000
14 | 000000000
15 | 0000000000000
16 | 0000
17 | 00
18 | 0000000000000
19 | 00000
20 | 000000
21 | 000000
22 | 000
23 | 00000000
24 | 000
25 | 000
```

2. 建構以下資料框架(Dataframe)，並將欄位名稱由左至右命名為crew、job、bounty。

建構好後可透過View()函數或是直接在程式執行區(R console)輸入你為此dataframe設定的變數名稱，將可秀出建構好的資料框架結果。請截圖透過R建立的整個資料框架，包含欄、列名稱，並附上程式碼。

Crew	Job	Bounty
Luffy	Captain	15
Zoro	Swordman	3.2
Sanji	Chef	3.3

程式碼及執行結果：

```
1 rm(list=ls())
2 Crew = scan(what="")
3 Luffy Zoro Sanji
4 Job = scan(what="")
5 Captain Swordman Chef
6 Bounty = c(15, 3.2, 3.3)
7 df = data.frame(Crew, Job, Bounty)
8 View(df)
9
```

```
> rm(list=ls())
> Crew = scan(what="")
1: Luffy Zoro Sanji
4:
Read 3 items
> Job = scan(what="")
1: Captain Swordman Chef
4:
Read 3 items
> Bounty = c(15, 3.2, 3.3)
> df = data.frame(Crew, Job, Bounty)
> View(df)
```

Dataframe 內容：

	Crew	Job	Bounty
1	Luffy	Captain	15.0
2	Zoro	Swordman	3.2
3	Sanji	Chef	3.3