

# Stat123 Lab 2

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## LAB 2

```
#QUESTION 1 a)
Fdata <- read.csv("FlowerData.csv")

#QUESTION 1 b)
class(Fdata)

[1] "data.frame"

#this out put of this is data.frame so it is a data frame

#QUESTION 1 c)
FlowerMatrix <- as.matrix(Fdata[c(2,3)])
head(FlowerMatrix)

      Age..days. Height..cm.
[1,]         31         5.0
[2,]         48        16.0
[3,]         39        12.5
[4,]         29         6.0
[5,]         32         4.0
[6,]         37         7.0

#QUESTION 1 d)
colnames(FlowerMatrix) <- c("Age (in days)", "Height (in cm)")

#QUESTION 1 e)
rownames(FlowerMatrix) <- Fdata$Individual
head(FlowerMatrix)

      Age (in days) Height (in cm)
a             31         5.0
b             48        16.0
c             39        12.5
d             29         6.0
e             32         4.0
f             37         7.0

#QUESTION 2 a)
mean(FlowerMatrix[,1])

[1] 37.42222
```

```
#QUESTION 2 b)
mean(FlowerMatrix[,2])
```

```
[1] 11.87778
```

```
#QUESTION 2 c)
height <- FlowerMatrix[,2]
height[which.max(height)]
```

```
jj
19
```

```
#QUESTION 2 d)
age <- FlowerMatrix[,1]
age[which.min(age)]
```

```
h
26
```

```
#QUESTION 2 e)
colour <- Fdata$Colour
colour[which.max(height)]
```

```
[1] "yellow"
```

```
colour[which.min(age)]
```

```
[1] "yellow"
```

```
#QUESTION 3 a)
Fdata[10:13,]
```

	Individual	Age..days.	Height..cm.	Colour
10	j	34	8.5	purple
11	k	38	12.0	pr
12	l	40	18.0	yellow
13		45	16.0	yellow

```
#QUESTION 3 b)
Fdata[11,4] <- "purple"
ind <- Fdata[,1]
Fdata[13,1] = "m"
Fdata[10:13,]
```

	Individual	Age..days.	Height..cm.	Colour
10	j	34	8.5	purple
11	k	38	12.0	purple
12	l	40	18.0	yellow
13	m	45	16.0	yellow