

HW2_631

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Exercise 1

a.

```
data1 = read.table("http://www.stat.umn.edu/~gary/book/fcdae.data/ex3.1",header=TRUE)
#data1
```

```
mu = mean(data1$y)
mu1 = mean(data1[which(data1$diet==1),]$y)
mu2 = mean(data1[which(data1$diet==2),]$y)
mu3 = mean(data1[which(data1$diet==3),]$y)
mu4 = mean(data1[which(data1$diet==4),]$y)
a1 = mu1 - mu
a2 = mu2 - mu
a3 = mu3 - mu
a4 = mu4 - mu
```

```
# Overall mean
mu
```

```
## [1] 3.718276
```

```
# treatment effects
a1
```

```
## [1] 0.02743842
```

```
a2
```

```
## [1] -0.1382759
```

```
a3
```

```
## [1] -0.1199425
```

```
a4
```

```
## [1] 0.2042241
```

b.

```
# full.model<-aov(y~fdiet,data=data1)
# anova(full.model)
```