Homework 9 Program Body

```
source("HWFunction.R")
```

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Question 1

```
print(dataset <-gendata(nGroup, nName ,nSize = c(30,30), nMean=c(74,62), nSD))
```

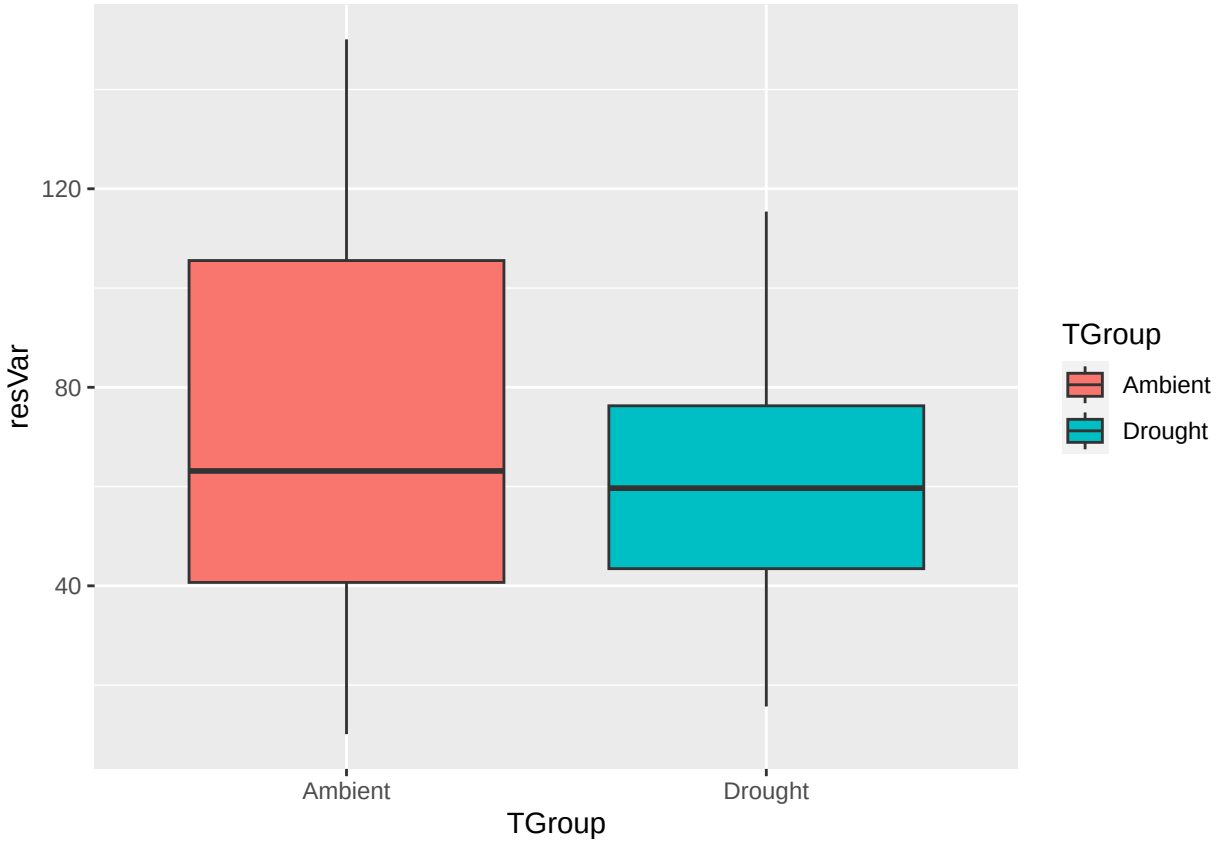
```
##     TGroup    resVar
## 1  Ambient  84.87527
## 2  Ambient  54.08685
## 3  Ambient  39.64500
## 4  Ambient  43.80745
## 5  Ambient  20.90481
## 6  Ambient  36.17599
## 7  Ambient  53.30329
## 8  Ambient 111.93764
## 9  Ambient 107.83197
## 10 Ambient  14.76960
## 11 Ambient 107.42589
## 12 Ambient  64.69718
## 13 Ambient  87.96319
## 14 Ambient  90.81786
## 15 Ambient  53.06526
## 16 Ambient  10.11153
## 17 Ambient 150.10909
## 18 Ambient 145.96353
## 19 Ambient  27.66940
## 20 Ambient  53.32897
## 21 Ambient 109.23553
## 22 Ambient  99.87649
## 23 Ambient  84.00482
## 24 Ambient  96.52703
## 25 Ambient 124.49179
## 26 Ambient  28.46868
## 27 Ambient  31.12837
## 28 Ambient 119.51539
## 29 Ambient  61.59572
## 30 Ambient  48.66188
## 31 Drought  62.67653
## 32 Drought  45.48653
## 33 Drought  22.79325
## 34 Drought 103.43244
## 35 Drought  65.08032
## 36 Drought  22.60514
## 37 Drought  60.97227
## 38 Drought  73.13914
```

```
## 39 Drought  52.28829
## 40 Drought  86.25620
## 41 Drought  15.68511
## 42 Drought  52.36623
## 43 Drought  49.06444
## 44 Drought  38.55263
## 45 Drought  84.05612
## 46 Drought  83.24977
## 47 Drought  17.05201
## 48 Drought  58.39044
## 49 Drought  96.72673
## 50 Drought  42.40560
## 51 Drought  79.73669
## 52 Drought  77.32407
## 53 Drought  51.30814
## 54 Drought 115.41058
## 55 Drought  28.63808
## 56 Drought  66.63046
## 57 Drought  70.42868
## 58 Drought  43.28031
## 59 Drought  43.98891
## 60 Drought  64.90109
```

```
print(model <- anovamodel(dataset))
```

```
##              Df Sum Sq Mean Sq F value Pr(>F)
## data$TGroup   1   2510    2510   2.295  0.135
## Residuals    58  63429    1094
```

```
plot <- boxplot(dataset)
```

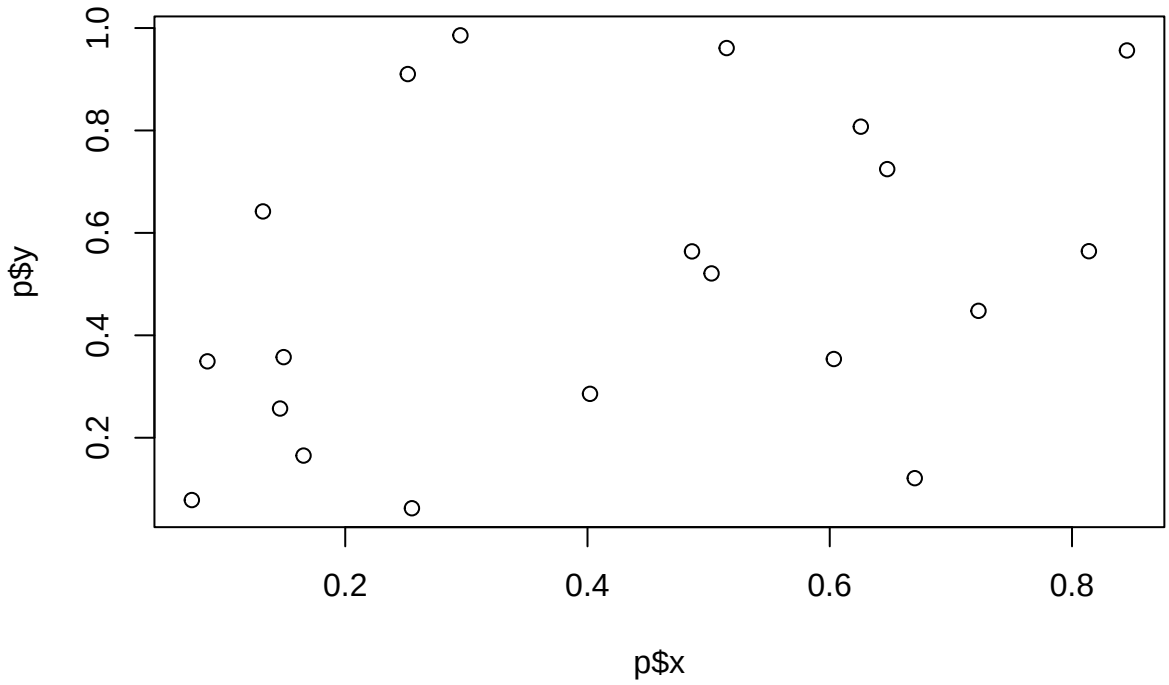


Question 2

```
aov_table()
```

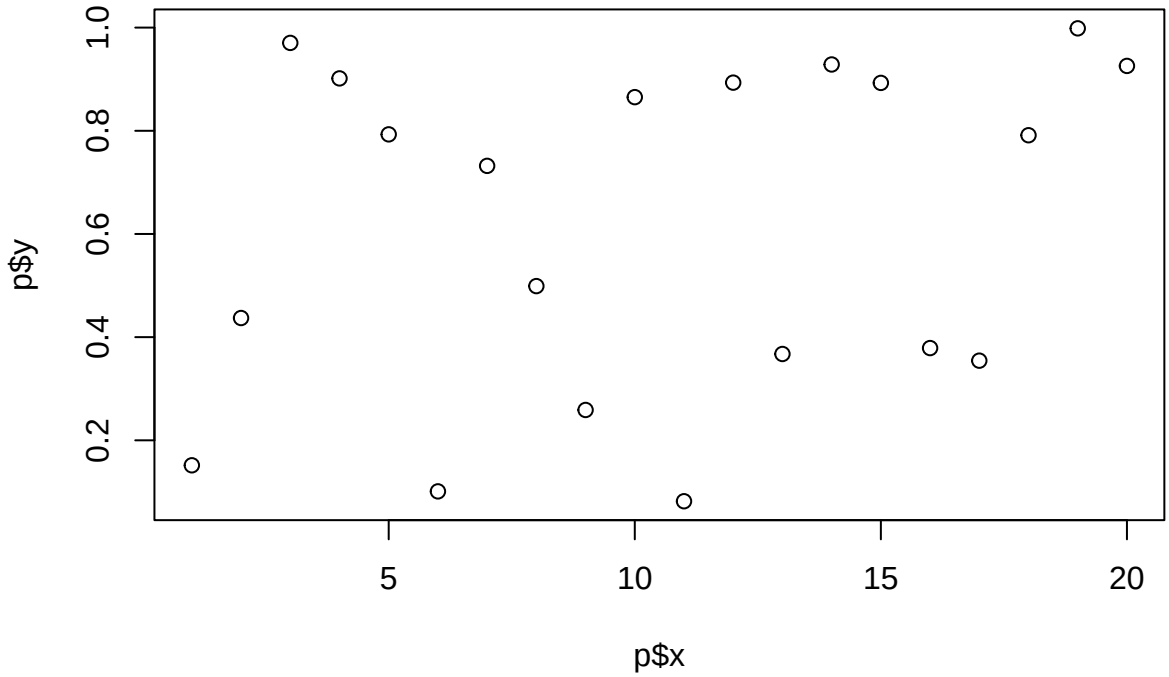
```
##        df        F  p-value
##  1.000000 2.295133 0.135211
```

```
fitdata()
```




```
##     slope    pValue
## 0.2998693 0.1176669
```

```
params <-list(x=1:20,y=runif(20))
fitdata(params)
```




```
##    slope   pValue
## 4.802039 0.266401
```