

## TP1

```
library(questionr)
```

```
data(hdv2003)
```

```
d<-hdv2003
```

```
# View(d)
```

```
table(d$sexe)
```

```
##
```

```
## Homme Femme
```

```
## 899 1101
```

```
table(d$occup)
```

```
##
```

```
## Exerce une profession Chomeur Etudiant, eleve
```

```
## 1049 134 94
```

```
## Retraite Retire des affaires Au foyer
```

```
## 392 77 171
```

```
## Autre inactif
```

```
## 83
```

```
sort(table(d$occup))
```

```
##
```

```
## Retire des affaires Autre inactif Etudiant, eleve
```

```
## 77 83 94
```

```
## Chomeur Au foyer Retraite
```

```
## 134 171 392
```

```
## Exerce une profession
```

```
## 1049
```

```
sort(table(d$occup),decreasing = TRUE)
```

```
##
```

```
## Exerce une profession Retraite Au foyer
```

```
## 1049 392 171
```

```
## Chomeur Etudiant, eleve Autre inactif
```

```
## 134 94 83
```

```
## Retire des affaires
```

```
## 77
```

```
table(d$trav.satisf, useNA = "ifany")
```

```
##
```

```
## Satisfaction Insatisfaction Equilibre <NA>
```

```
## 480 117 451 952
```

```
summary(d$qualif)
```

```
##      Ouvrier specialise      Ouvrier qualifie      Tech
nicien
##              203              292
      86
## Profession intermediaire      Cadre      E
mploye
##              160              260
      594
##              Autre      NA's
##              58              347
```

```
prop.table(table(d$qualif))
```

```
##
##      Ouvrier specialise      Ouvrier qualifie      Tech
nicien
##              0.12280702      0.17664852      0.05
202662
## Profession intermediaire      Cadre      E
mploye
##              0.09679371      0.15728978      0.35
934664
##              Autre
##              0.03508772
```

```
prop.table(table(d$qualif, useNA = "ifany"))
```

```
##
##      Ouvrier specialise      Ouvrier qualifie      Tech
nicien
##              0.1015      0.1460
0.0430
## Profession intermediaire      Cadre      E
mploye
##              0.0800      0.1300
0.2970
##              Autre      <NA>
##              0.0290      0.1735
```

```
freq(d$qualif)
```

```
##              n      % val%
## Ouvrier specialise      203 10.2 12.3
## Ouvrier qualifie      292 14.6 17.7
## Technicien      86 4.3 5.2
## Profession intermediaire      160 8.0 9.7
## Cadre      260 13.0 15.7
## Employe      594 29.7 35.9
```

```
## Autre          58  2.9  3.5
## NA             347 17.3   NA
```

```
table(d$freres.soeurs)
```

```
##
##  0   1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16
## 18  22
## 167 407 427 284 210 151  99  94  52  37  21  21   8  10   4   4   1
##  2   1
```

```
prop.table(table(d$freres.soeurs))
```

```
##
##      0      1      2      3      4      5      6      7      8
##  9    10
## 0.0835 0.2035 0.2135 0.1420 0.1050 0.0755 0.0495 0.0470 0.0260 0.018
## 5 0.0105
##      11      12      13      14      15      16      18      22
## 0.0105 0.0040 0.0050 0.0020 0.0020 0.0005 0.0010 0.0005
```

```
freq(d$freres.soeurs, cum = TRUE, total = TRUE, digits = 2, exclude = NA)
```

```
##      n      %   %cum
## 0    167   8.35   8.35
## 1    407  20.35  28.70
## 2    427  21.35  50.05
## 3    284  14.20  64.25
## 4    210  10.50  74.75
## 5    151   7.55  82.30
## 6     99   4.95  87.25
## 7     94   4.70  91.95
## 8     52   2.60  94.55
## 9     37   1.85  96.40
## 10    21   1.05  97.45
## 11    21   1.05  98.50
## 12     8   0.40  98.90
## 13    10   0.50  99.40
## 14     4   0.20  99.60
## 15     4   0.20  99.80
## 16     1   0.05  99.85
## 18     2   0.10  99.95
## 22     1   0.05 100.00
## Total 2000 100.00 100.00
```

```
summary(d$freres.soeurs)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      0.000   1.000   2.000   3.283   5.000   22.000
```

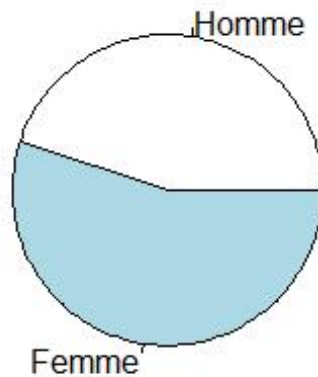
```

d$age.class<-cut(d$age, breaks = 5)
d$age.class<-cut(d$age, c(18, 20, 40, 60, 80, 97),include.lowest = TRUE,
  labels = c("<20ans","21-40ans","41-60ans","61-80ans","80ans"))
#icut()
## Cutting d$age into d$age_rec
d$age_rec <- cut(d$age, include.lowest = TRUE, right = FALSE, dig.lab =
  4, breaks = 5)
freq(d$age.class, cum = TRUE, total = TRUE, digits = 2, exclude = NA)

##           n      %  %cum
## <20ans     72   3.6   3.6
## 21-40ans   660  33.0  36.6
## 41-60ans   780  39.0  75.6
## 61-80ans   436  21.8  97.4
## 80ans       52   2.6 100.0
## Total    2000 100.0 100.0

pie(table(d$sexe))

```



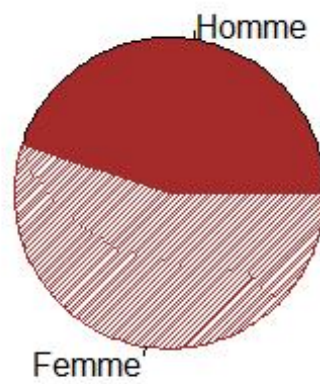
```

pie(table(d$sexe), col = c("brown", "blue"))

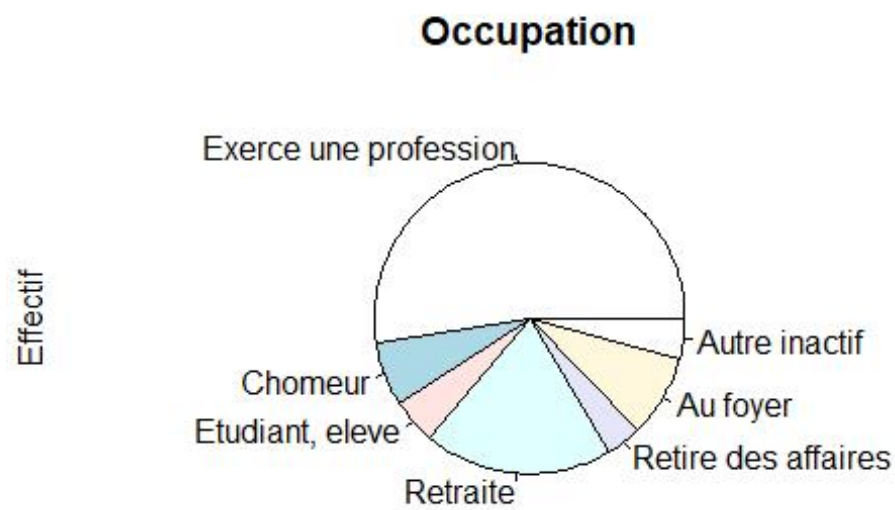
```



```
pie(table(d$sexe), col = c("brown"), density = c(NA, 50, 30))
```

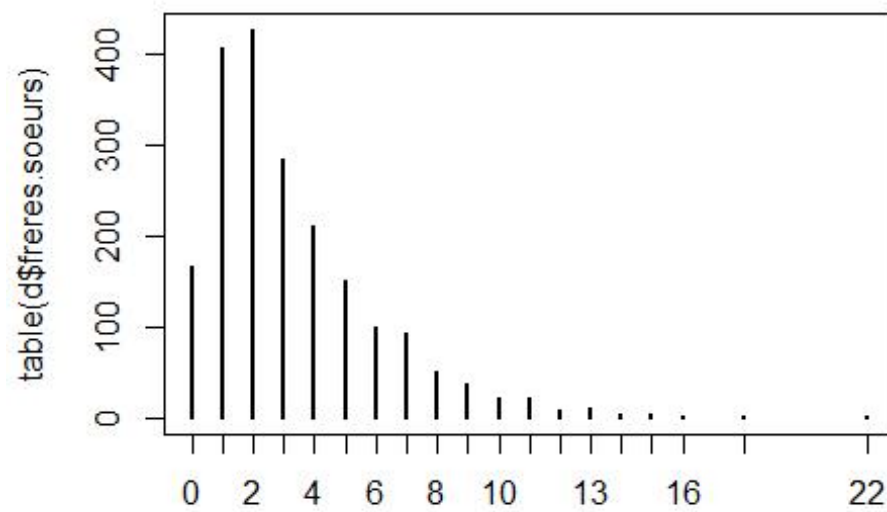


```
pie(table(d$occup), main = "Occupation", ylab="Effectif")
```

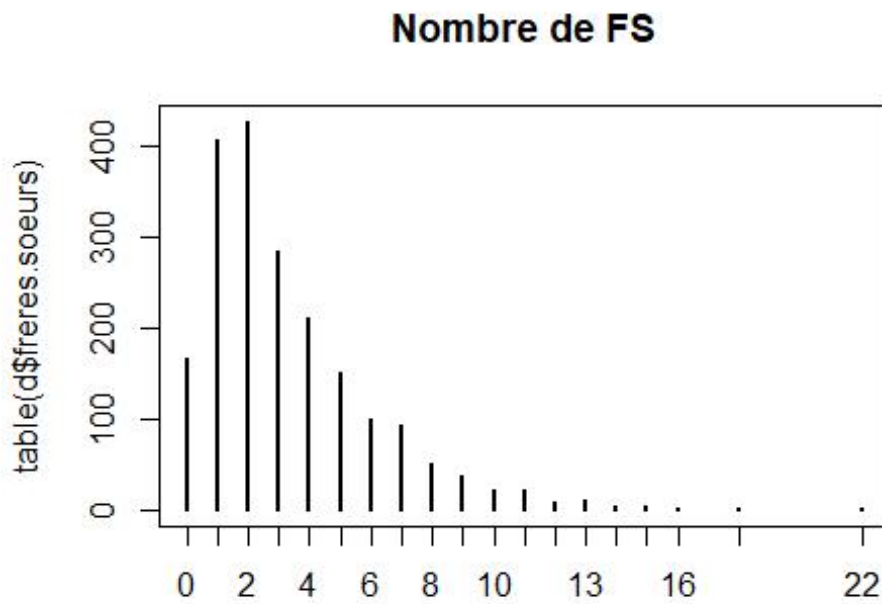


`##?pie`

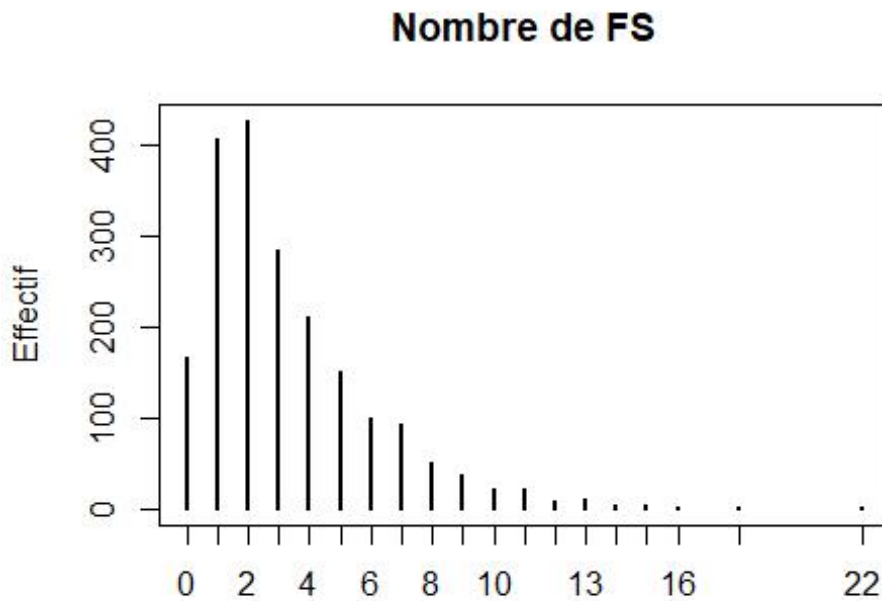
`plot(table(d$freres.soeurs))`



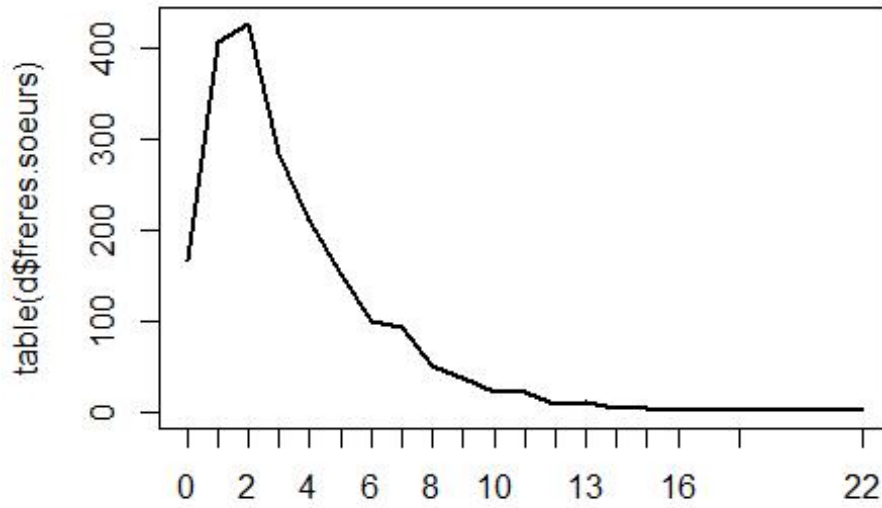
```
plot(table(d$freres.soeurs), main = "Nombre de FS")
```



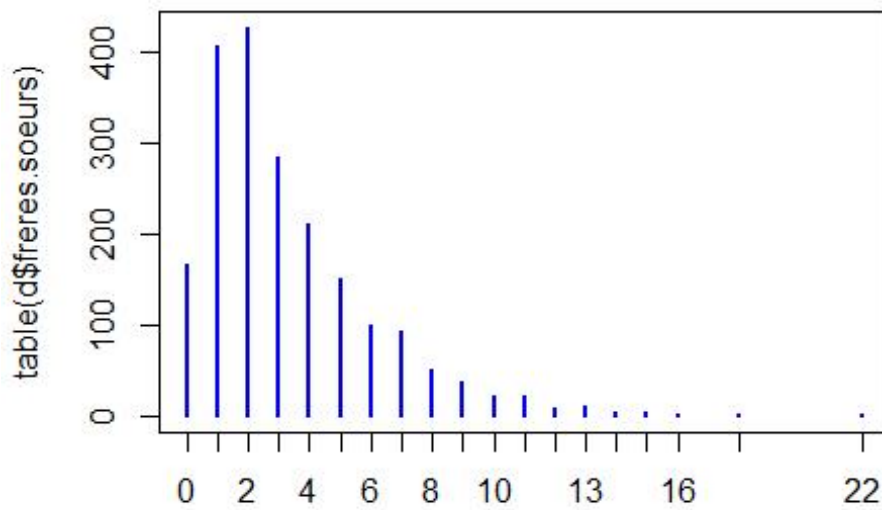
```
plot(table(d$freres.soeurs), main = "Nombre de FS", ylab = "Effectif")
```



```
plot(table(d$freres.soeurs), type = "l") #p,n,h,o ...
```



```
plot(table(d$freres.soeurs), col = "Blue")
```





```
#?plot
```

```
hist(d$heures.tv, main = "Nombre d'heures passées devant la télé", xlab  
= "Heures", ylab = "Effectif")
```

