

oving1.R

Kasper

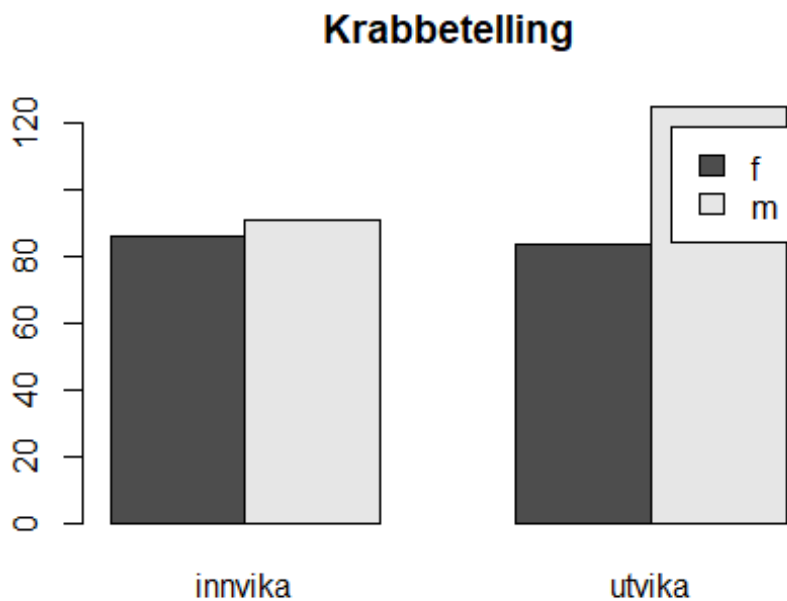
2021-09-13

Del 2:

```
#Les in krabbedate
library("readxl")
krabber <- read_excel("krabbe.xlsx")

#Kontingenstabell krabber
telling <- table(krabber$Gender, krabber$Location)

#Stolpediagram krabber
barplot(
  telling, beside = TRUE, main = "Krabbetelling", sub = "Krabbetelling", legend = c("f", "m")
)
```



Krabbetelling

```
#Konstruere krabbeM og krabbeF vektor
Gender <- krabber$Gender
Size <- krabber$Size
TypeM <- Gender == "m"
```

```

krabbeM <- Size[TypeM]
TypeF <- Gender == "f"
krabbeF <- Size[TypeF]

#Kvantitativ oppsummering av data
summary(krabbeM)

##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##  0.6378  1.1565  1.4134  1.8077  1.8469  6.6659

summary(krabbeF)

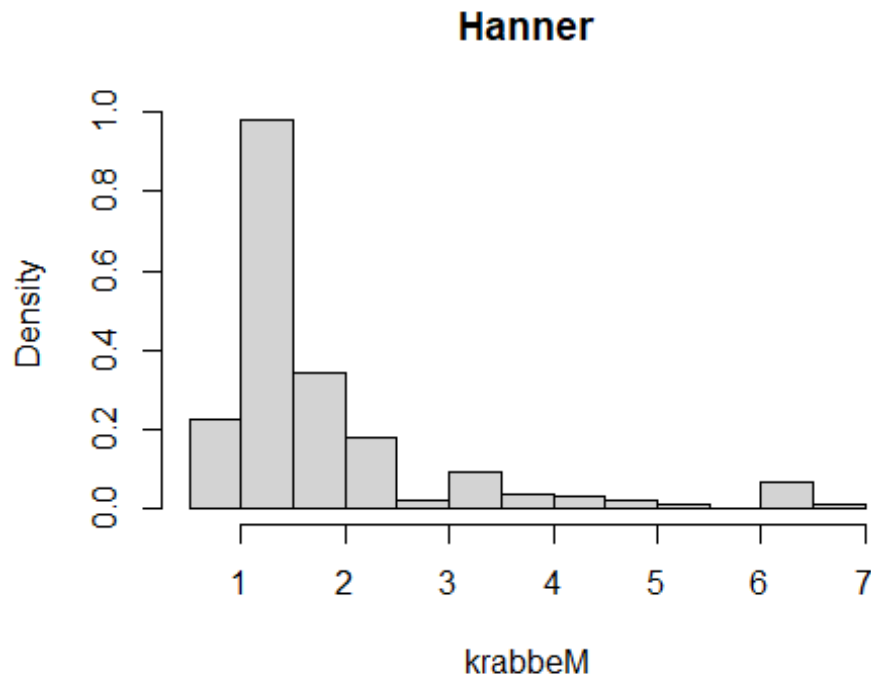
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##  0.6675  1.1193  1.4997  1.8728  2.2506  6.3114

#Kvantitativ oppsummering av data i mm
krabbeM.mm <- krabbeM * 10
summary(krabbeM.mm)

##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   6.378  11.565  14.134  18.077  18.469  66.659

# Skalert Histogram
hist(krabbeM, freq = FALSE, breaks = 10, main = "Hanner")

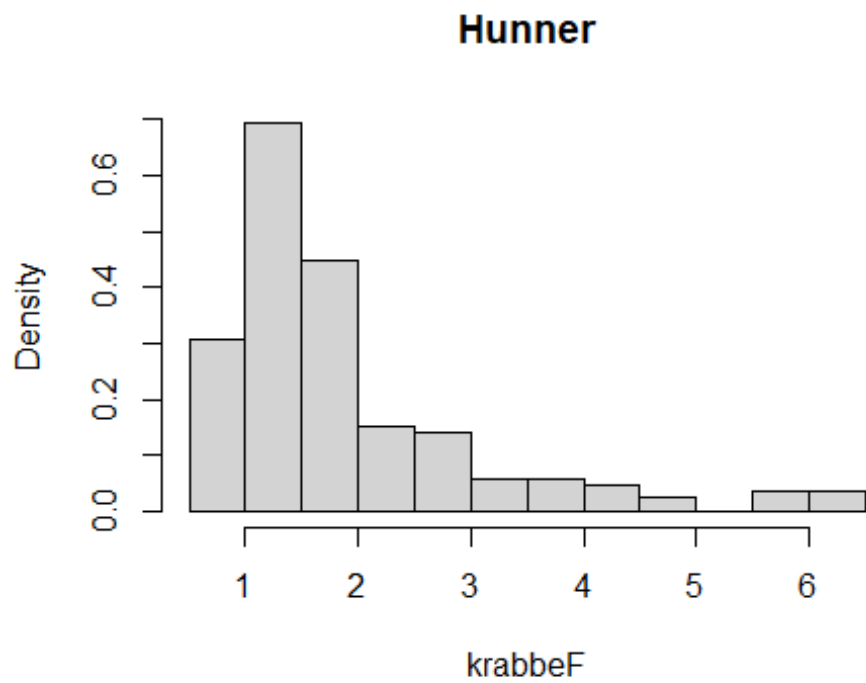
```



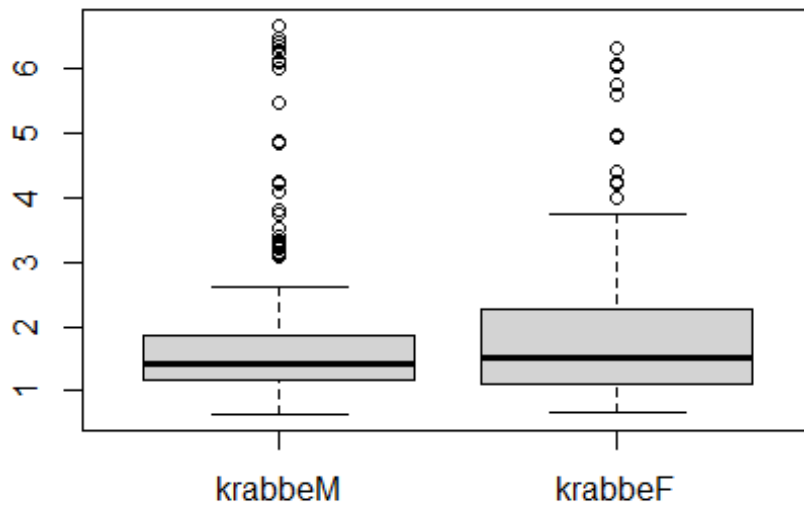
```

hist(krabbeF, freq = FALSE, breaks = 10, main = "Hunner")

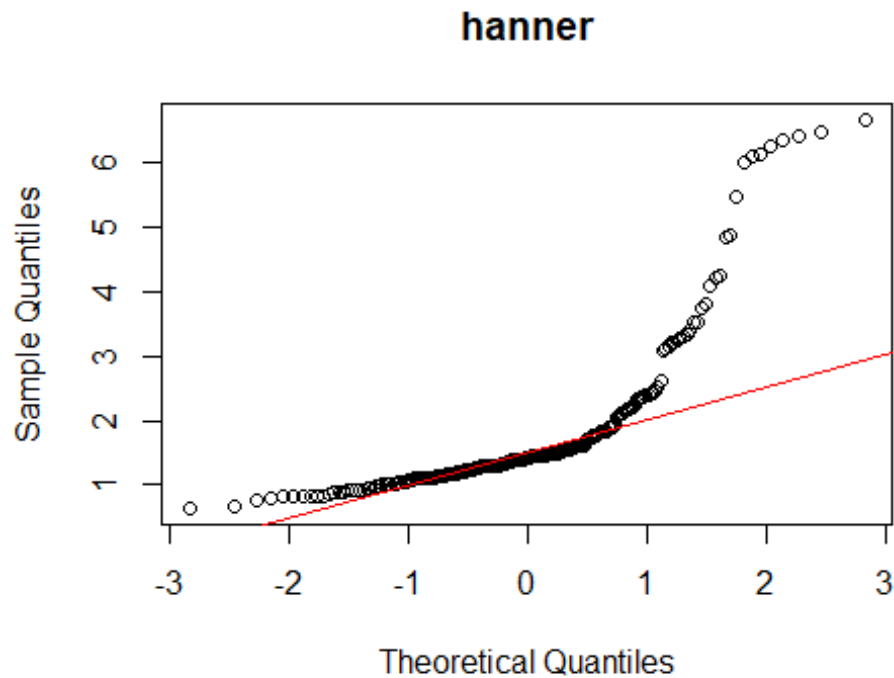
```



```
# Boxplot  
boxplot(krabbeM, krabbeF, names = c("krabbeM", "krabbeF"))
```



```
# normalplott:  
qqnorm(krabbeM, main = "hanner")  
qqline(krabbeM, col = "red")
```



Del 3:

1.

Mean in cm: 1.8077

Mean in mm: $1.8077 \cdot 10 = \underline{\underline{18.077}}$

2.

$IQR = Q_3 - Q_1$

$IQR_{hann} = 1.8469 - 1.1565 = \underline{\underline{0.6904}}$

$IQR_{hunn} = 2.2506 - 1.1193 = \underline{\underline{1.1313}}$

3.

Ulik spredning men ganske likt sentrum.

4.

Verdiene ser ikke normalfordelte ut siden dataene fordeler seg mot venstre og legger seg skrått mot høyre i histogrammet. Blir lite bjelleforming her. I normalplottet blir heller ikke dataene likt fordelt inn mot sentrum.