

MP*: notes tronc commun informatique *

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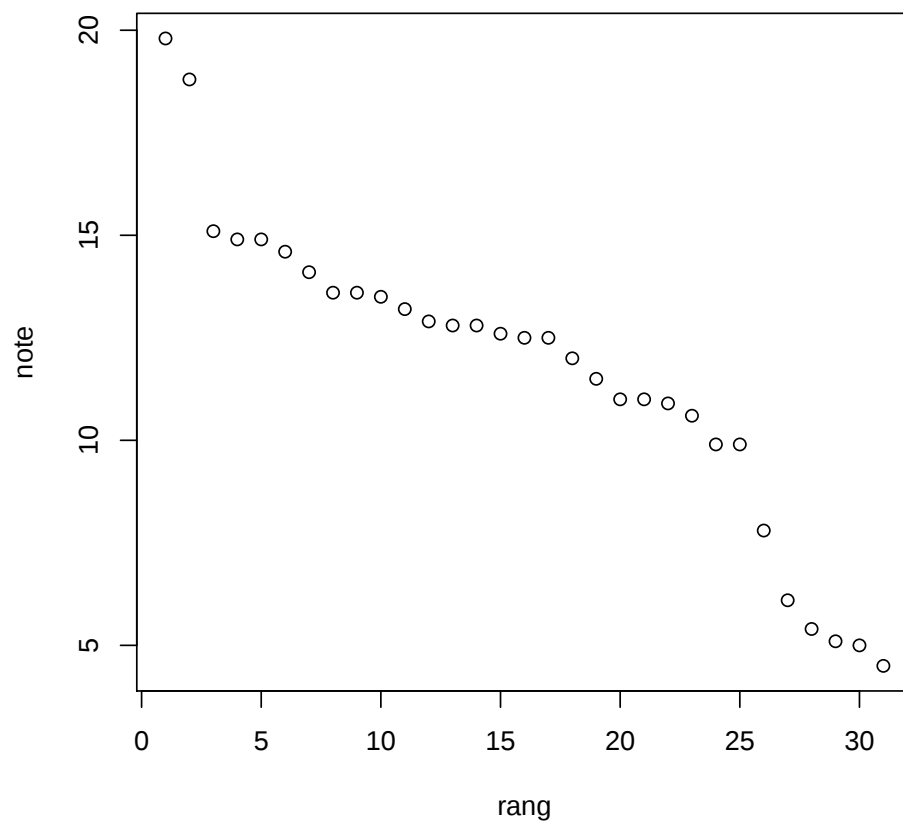
20 novembre 2016

1 DS1

1.1 Rangs

```
> note <- sort(round(ds1$Note,digits=1))  
> rang <- c(length(note):1)  
> plot(rang,note)
```

*Les calculs et graphiques de ce texte ont été réalisés avec R (<https://www.r-project.org/>), le logiciel de référence en matière de calculs statistiques.



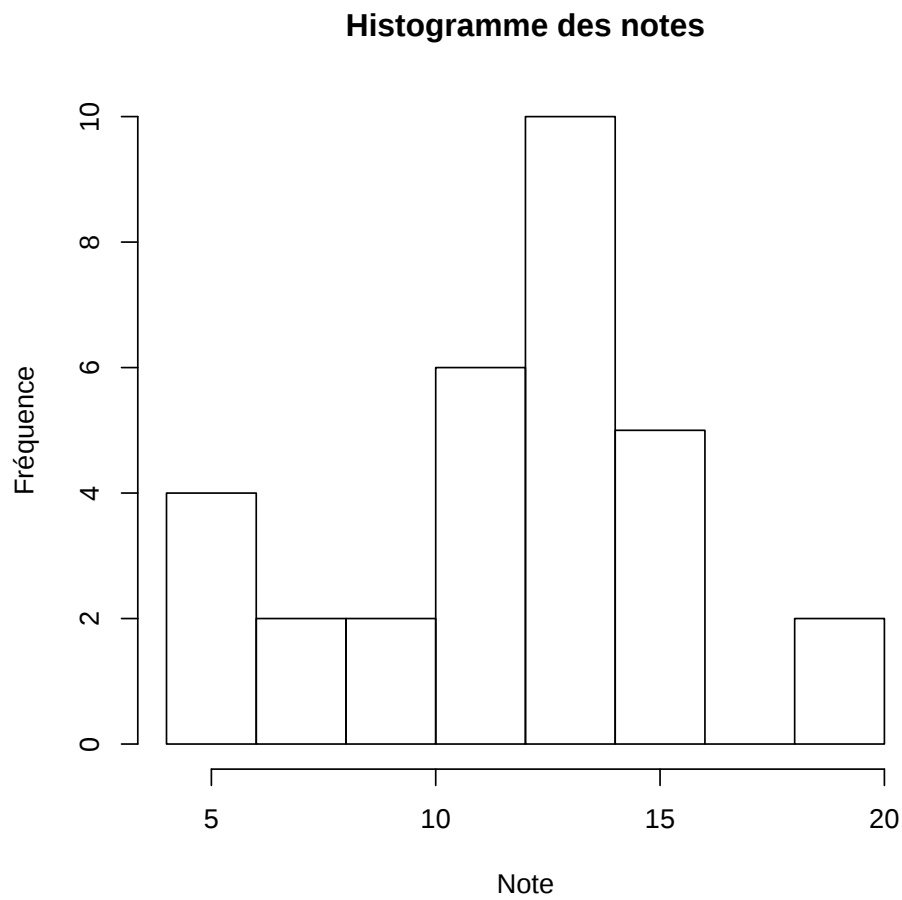
```
> print(cbind(rang,note))
```

	rang	note
[1,]	31	4.5
[2,]	30	5.0
[3,]	29	5.1
[4,]	28	5.4
[5,]	27	6.1
[6,]	26	7.8
[7,]	25	9.9
[8,]	24	9.9
[9,]	23	10.6
[10,]	22	10.9
[11,]	21	11.0
[12,]	20	11.0
[13,]	19	11.5
[14,]	18	12.0

[15,]	17	12.5
[16,]	16	12.5
[17,]	15	12.6
[18,]	14	12.8
[19,]	13	12.8
[20,]	12	12.9
[21,]	11	13.2
[22,]	10	13.5
[23,]	9	13.6
[24,]	8	13.6
[25,]	7	14.1
[26,]	6	14.6
[27,]	5	14.9
[28,]	4	14.9
[29,]	3	15.1
[30,]	2	18.8
[31,]	1	19.8

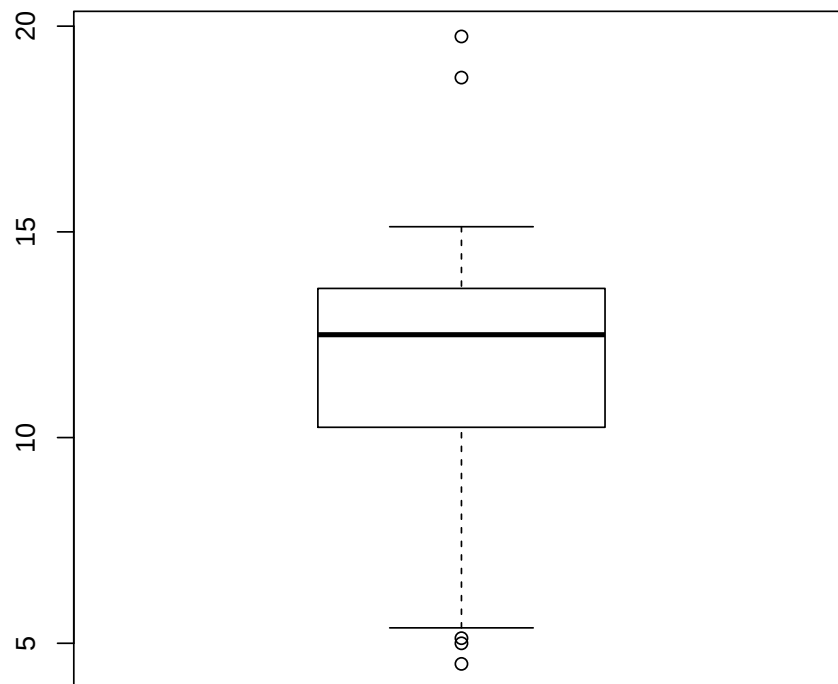
1.2 Histogramme

```
> hist(note,main='Histogramme des notes',ylab='Fréquence',xlab='Note')
```



1.3 Quartiles

```
> boxplot(ds1$Note)
```



```
> print(summary(ds1$Note))
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
4.50	10.25	12.50	11.70	13.62	19.75

1.4 Écart-type

Écart-type :

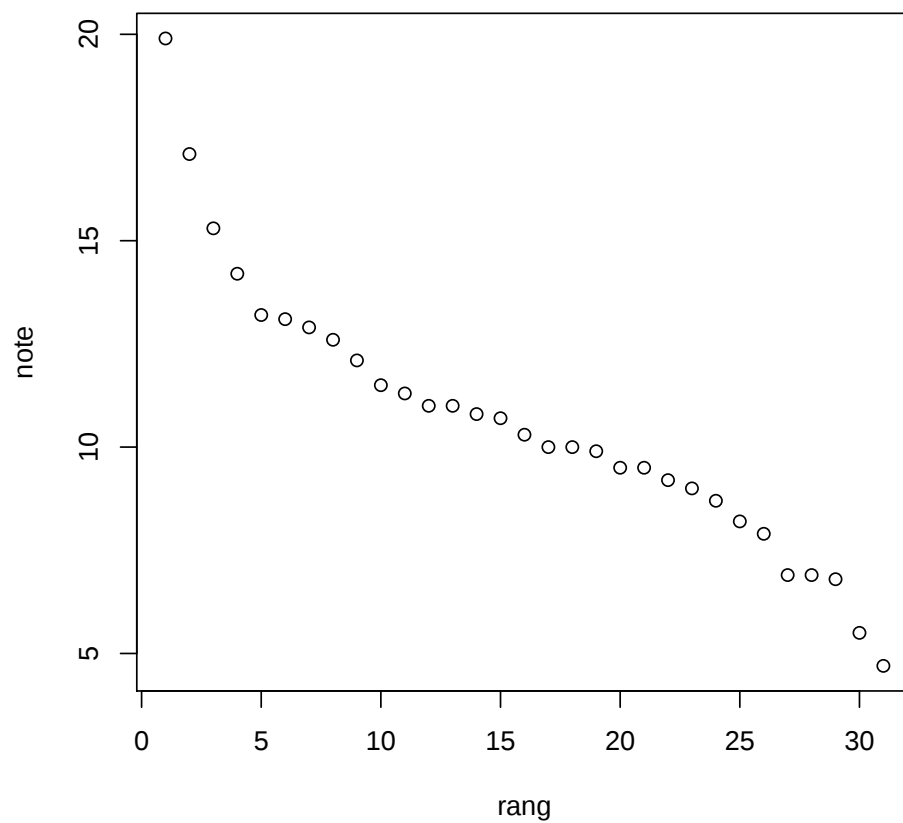
```
> print(sd(ds1$Note))
```

```
[1] 3.723193
```

2 DS2

2.1 Rangs

```
> note <- sort(round(ds2$Note,digits=1))
> rang <- c(length(note):1)
> plot(rang,note)
```



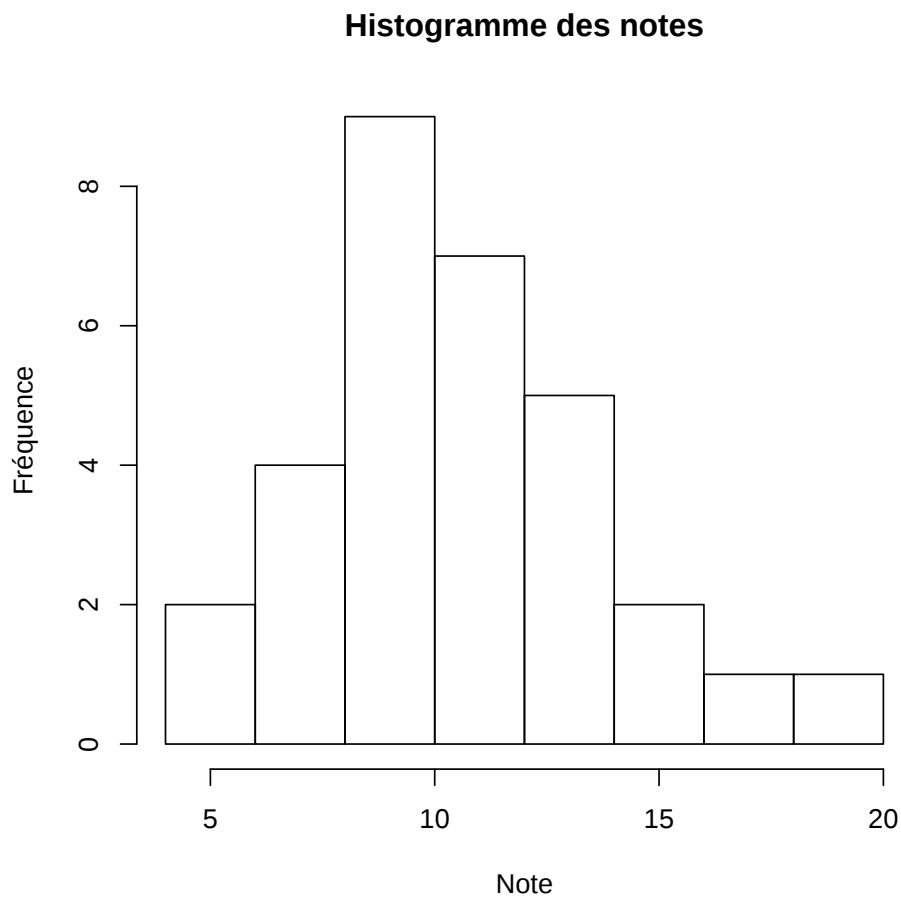
```
> print(cbind(rang,note))
```

	rang	note
[1,]	31	4.7
[2,]	30	5.5
[3,]	29	6.8
[4,]	28	6.9
[5,]	27	6.9
[6,]	26	7.9
[7,]	25	8.2
[8,]	24	8.7
[9,]	23	9.0
[10,]	22	9.2
[11,]	21	9.5
[12,]	20	9.5
[13,]	19	9.9
[14,]	18	10.0

[15,]	17	10.0
[16,]	16	10.3
[17,]	15	10.7
[18,]	14	10.8
[19,]	13	11.0
[20,]	12	11.0
[21,]	11	11.3
[22,]	10	11.5
[23,]	9	12.1
[24,]	8	12.6
[25,]	7	12.9
[26,]	6	13.1
[27,]	5	13.2
[28,]	4	14.2
[29,]	3	15.3
[30,]	2	17.1
[31,]	1	19.9

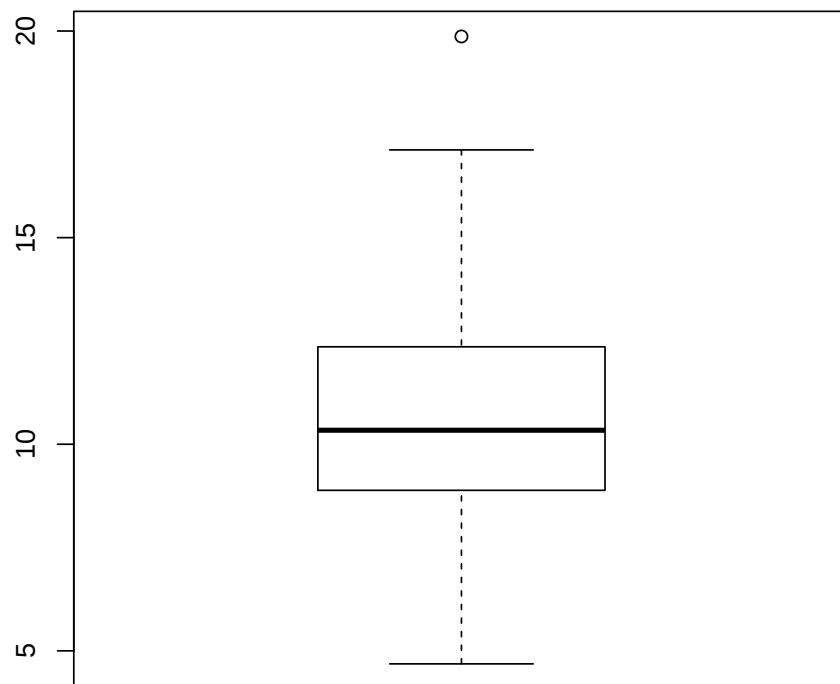
2.2 Histogramme

```
> hist(note,main='Histogramme des notes',ylab='Fréquence',xlab='Note')
```



2.3 Quartiles

```
> boxplot(ds2$Note)
```



```
> print(summary(ds2$Note))
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
4.685	8.885	10.340	10.650	12.360	19.870

2.4 Écart-type

Écart-type :

```
> print(sd(ds2$Note))
```

```
[1] 3.250994
```