CSE 635, Spring 2021, Homework 1
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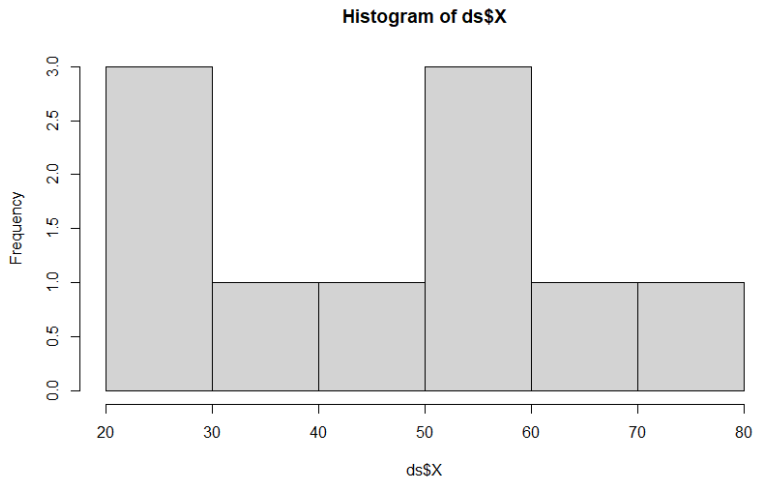
```
# Reading the data
> ds=read.table("myData.txt", header = TRUE)
> head(ds)
  X   Y
1 30  73
2 20  50
3 60 128
4 80 170
5 40  87
6 50 108
> str(ds)
'data.frame':     10 obs. of  2 variables:
 $ X: int  30 20 60 80 40 50 60 30 70 60
 $ Y: int  73 50 128 170 87 108 135 69 148 132
# We can get some of statistical summary using "summary" command in R
> summary(ds)
       X               Y
 Min.   :20.0   Min.   : 50.0
 1st Qu.:32.5   1st Qu.: 76.5
 Median :55.0   Median :118.0
 Mean   :50.0   Mean   :110.0
 3rd Qu.:60.0   3rd Qu.:134.2
 Max.   :80.0   Max.   :170.0

# N
> nrow(ds)
[1] 10

#=================Summary Statistics of X=============================
> mean(ds$X)
[1] 50
> sd(ds$X)
[1] 19.43651
> var(ds$X)
[1] 377.7778
> median(ds$X)
[1] 55
> IQR(ds$X)
[1] 27.5
> skewness(ds$X)
[1] -0.09570461
> kurtosis(ds$X)
[1] 1.851211
> min(ds$X)
```

[1] 20
> max(ds$X)
[1] 80
> range(ds$X)
[1] 20 80
> hist(ds$X)



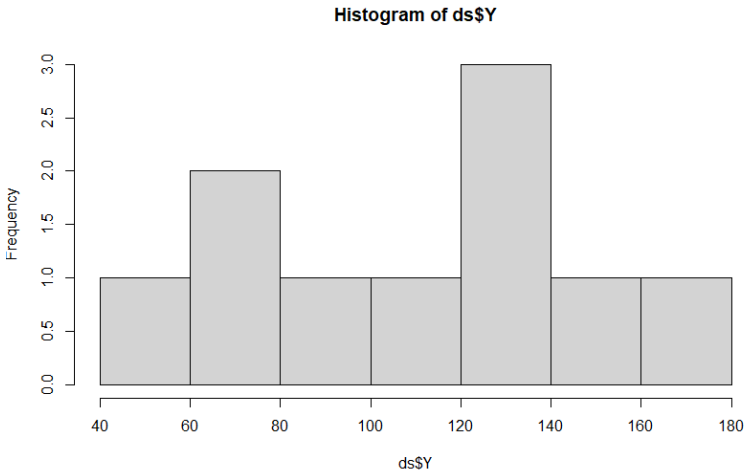
#skewness(ds$X)= -0.09570461<0 shows a longer or fatter tail on the left side of the
#distribution but because it is a small negative we can say that the data are fairly symmetrical

kurtosis(ds$X) = 1.851211 < 3 means the distribution produces fewer and less extreme
outliers than does the normal distribution or refers to a flat-topped distribution function

================== Summary Statistics of Y========================
> mean(ds$Y)
[1] 110
> sd(ds$Y)
[1] 38.95867
> var(ds$Y)
[1] 1517.778
> median(ds$Y)
[1] 118
> IQR(ds$Y)
[1] 57.75
> skewness(ds$Y)
[1] -0.08868097
> kurtosis(ds$Y)
[1] 1.806836
> min(ds$Y)
[1] 50
> max(ds$Y)
[1] 170
> range(ds$Y)

[1] 50 170

> hist(ds$Y)



#Skewness(ds$X)= -0.08868097<0 shows a longer or fatter tail on the left side of the distribution but because it is a small negative we can say that the data are fairly symmetrical

Kurtosis(ds$X) = 1.806836 < 3 means the distribution produces fewer and less extreme outliers than does the normal distribution or refers to a flat-topped distribution function