

Lab 1 Report

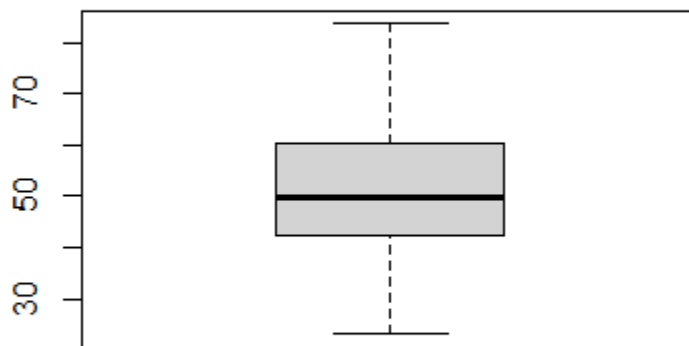
Tony Fausto, 662033401

VARIABLES USED: ECO.new and BDH.new

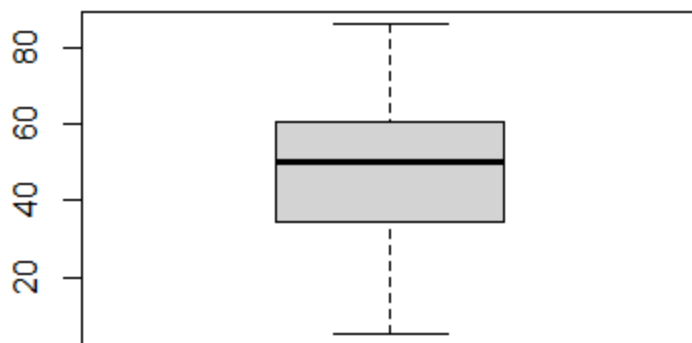
SUMMARIES:

```
> #variable summaries
> summary(epi.data$ECO.new)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
23.10  42.27   49.75   51.10  60.08   83.60
> summary(epi.data$BDH.new)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
 5.00  34.67   49.90   47.71  60.55   85.80
```

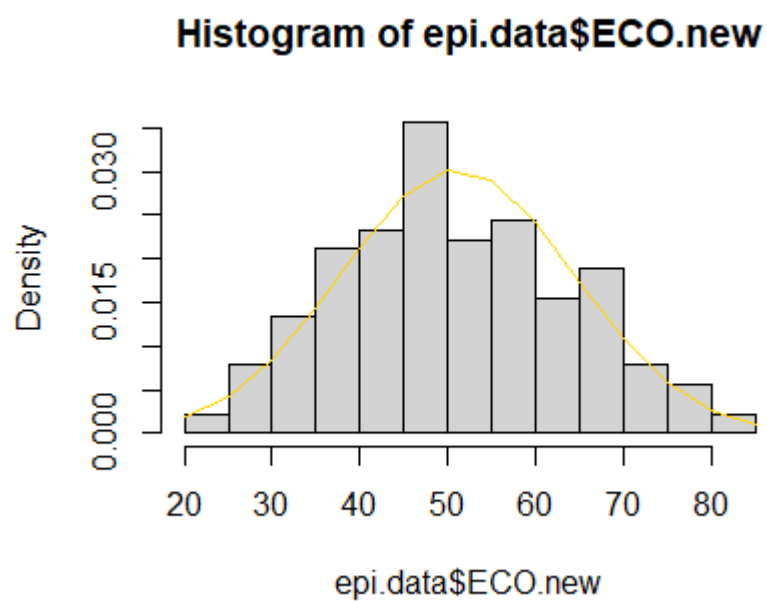
ECO BOXPLOT:



BDH BOXPLOT:

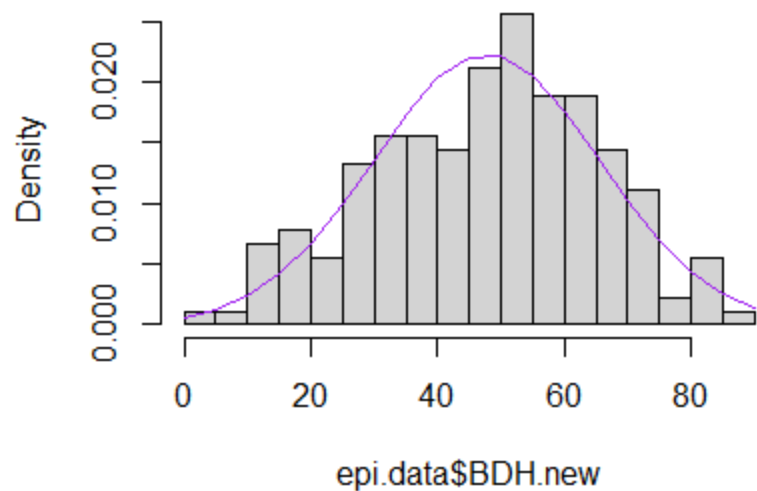


ECO Histogram:



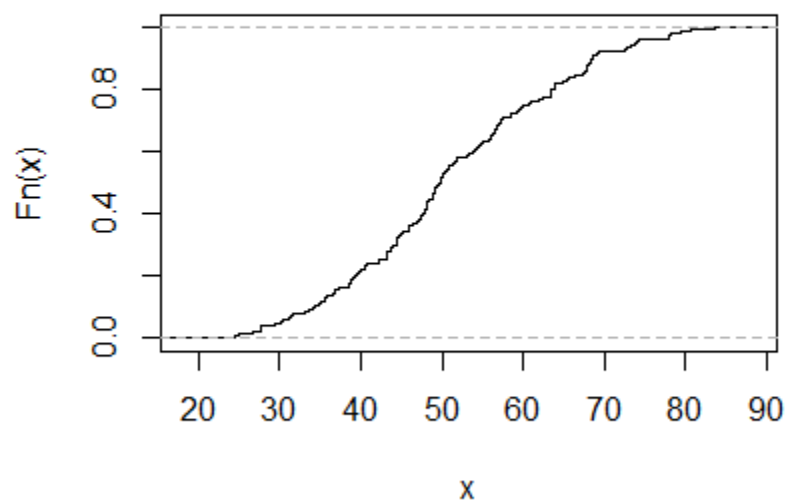
BDH Histogram:

Histogram of epi.data\$BDH.new



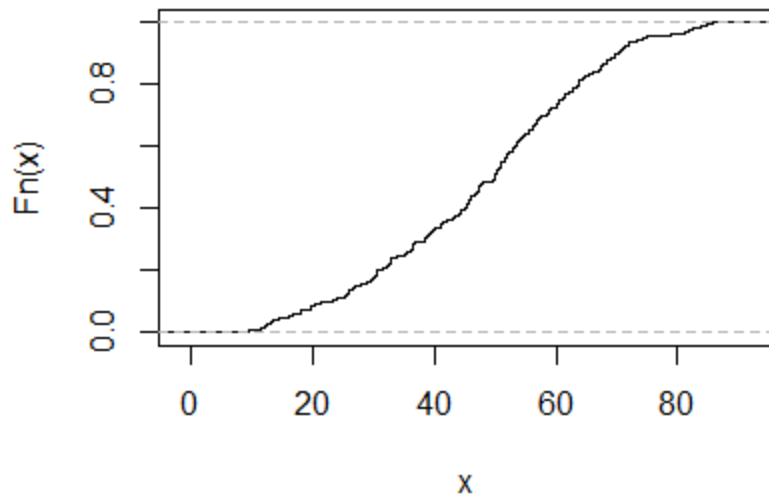
ECDF Plot ECO:

ecdf(epi.data\$ECO.new)



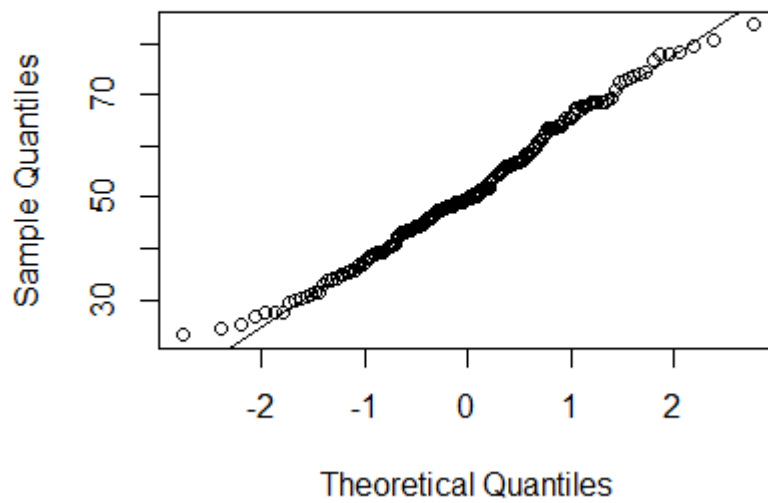
ECDF Plot BDH:

ecdf(epi.data\$BDH.new)

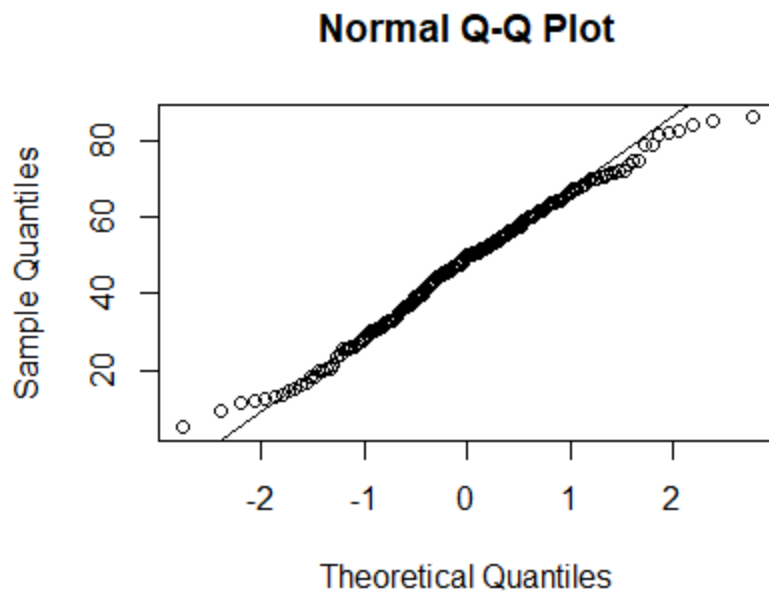


Q-Q Plot ECO:

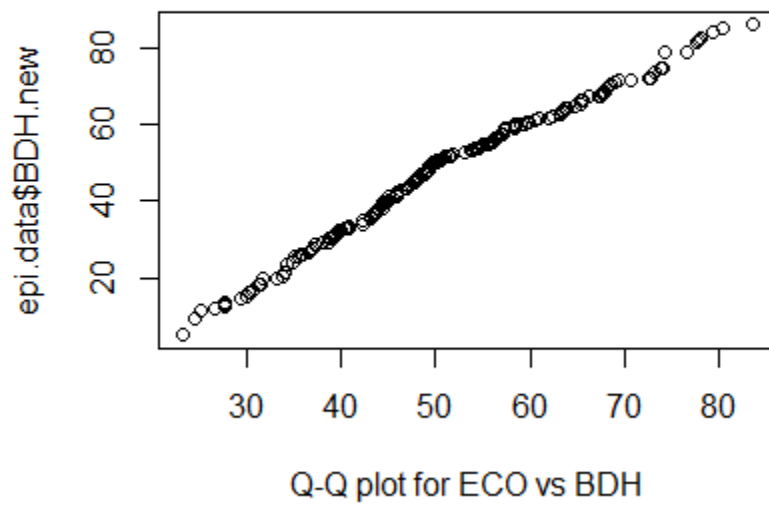
Normal Q-Q Plot



Q-Q Plot BDH:



Q-Q Plot Eco VS Bdh



Statistical tests:

```
> ##Normality statistical tests
> shapiro.test(epi.data$ECO.new)

      Shapiro-Wilk normality test

data:  epi.data$ECO.new
W = 0.98825, p-value = 0.1409

> shapiro.test(epi.data$BDH.new)

      Shapiro-Wilk normality test

data:  epi.data$BDH.new
W = 0.98759, p-value = 0.1149

>
> #Statistical test
> ks.test(epi.data$ECO.new, epi.data$BDH.new)

      Asymptotic two-sample Kolmogorov-Smirnov test

data:  epi.data$ECO.new and epi.data$BDH.new
D = 0.16111, p-value = 0.0187
alternative hypothesis: two-sided
```