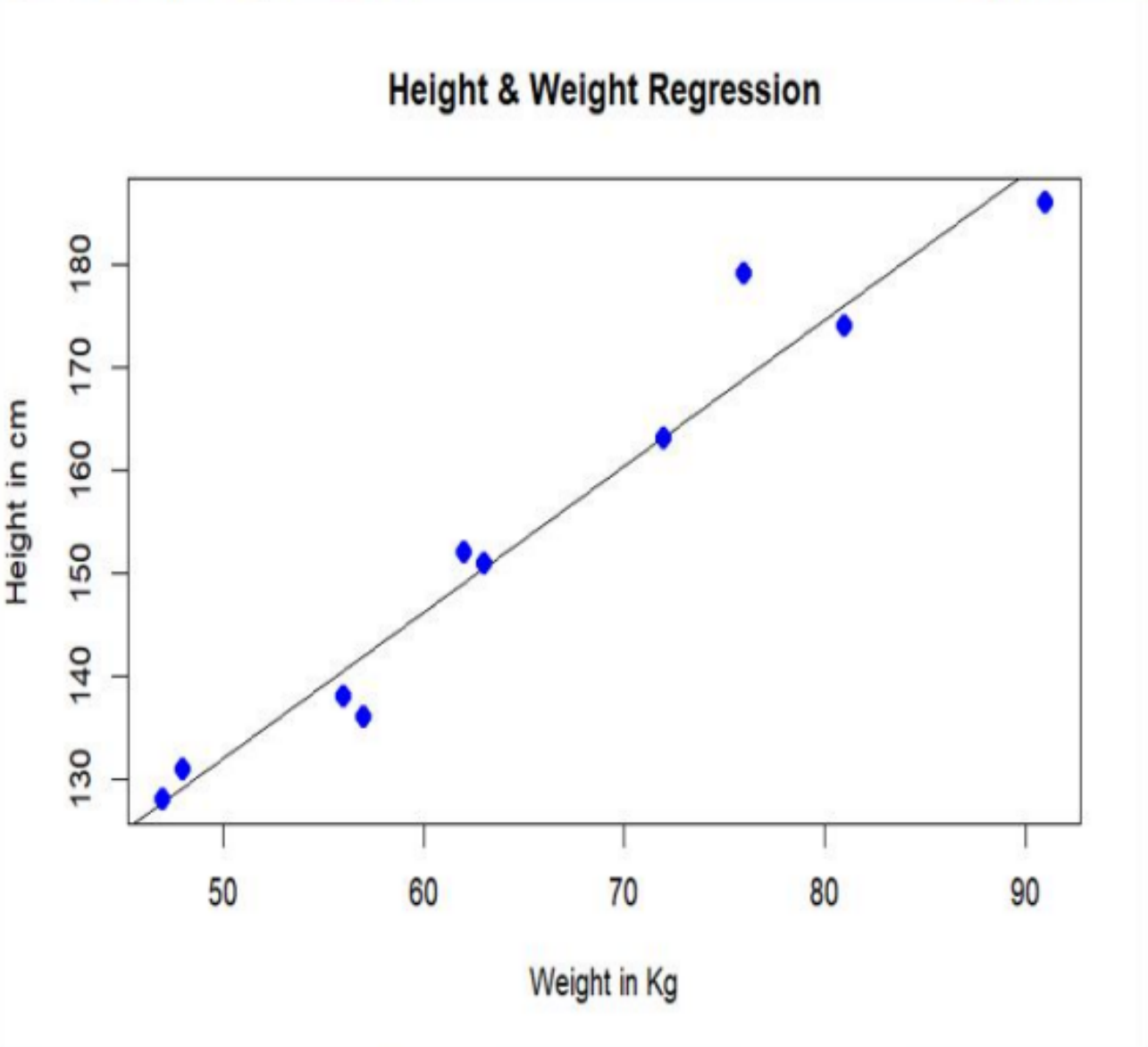
EXPERIMENT USING R-PROGRAMMING

M.ARBAZ SHERIEF

192124175

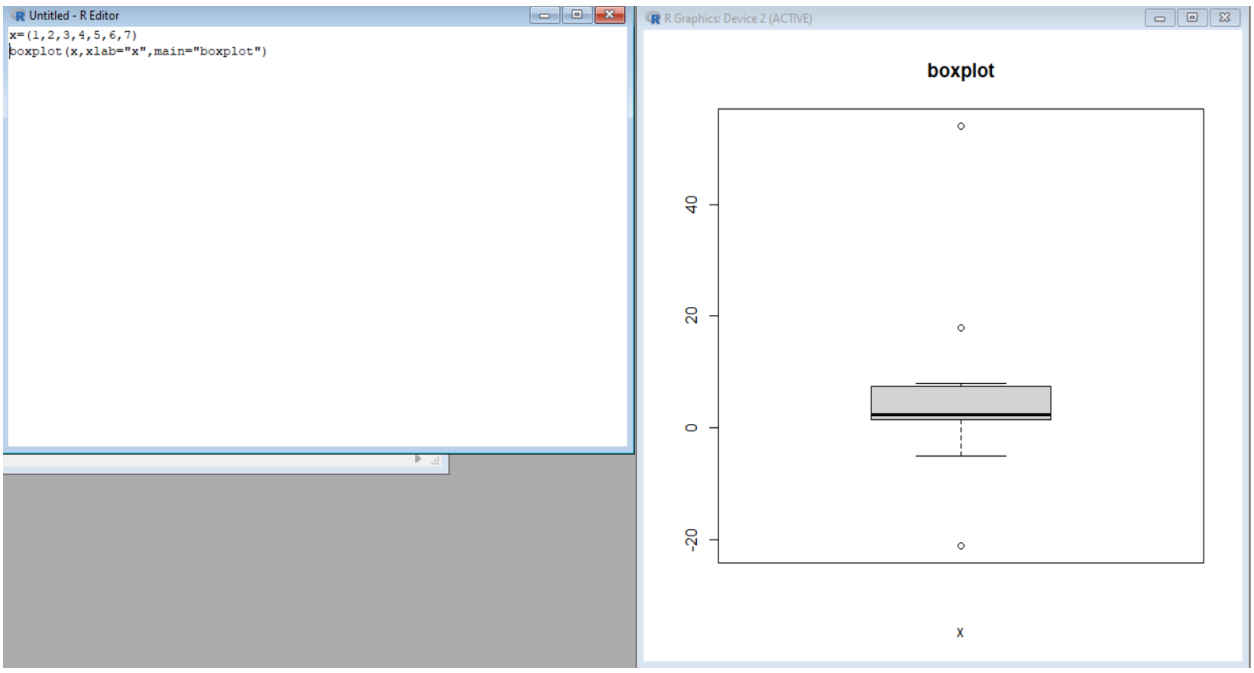
1.PREDICTION ANALYSIS USING LINEAR REGRESSION THROUGH R TOOL.

Output:

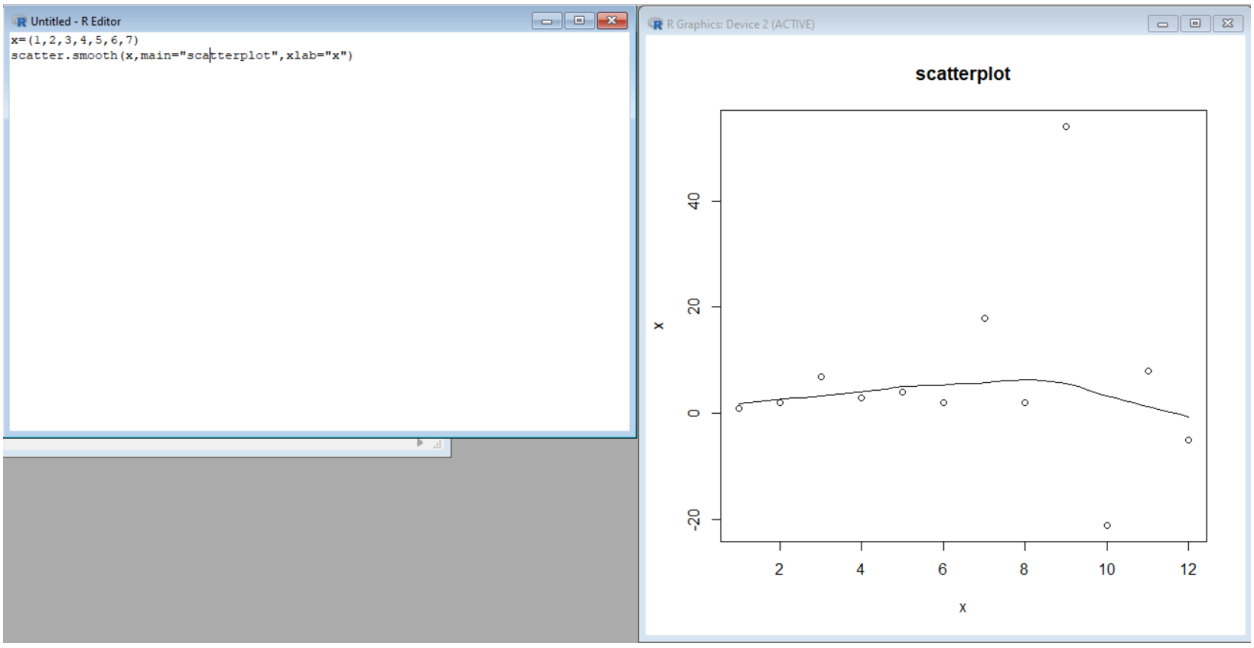


2.PLOTTING GRAPHS USING R TOOL.

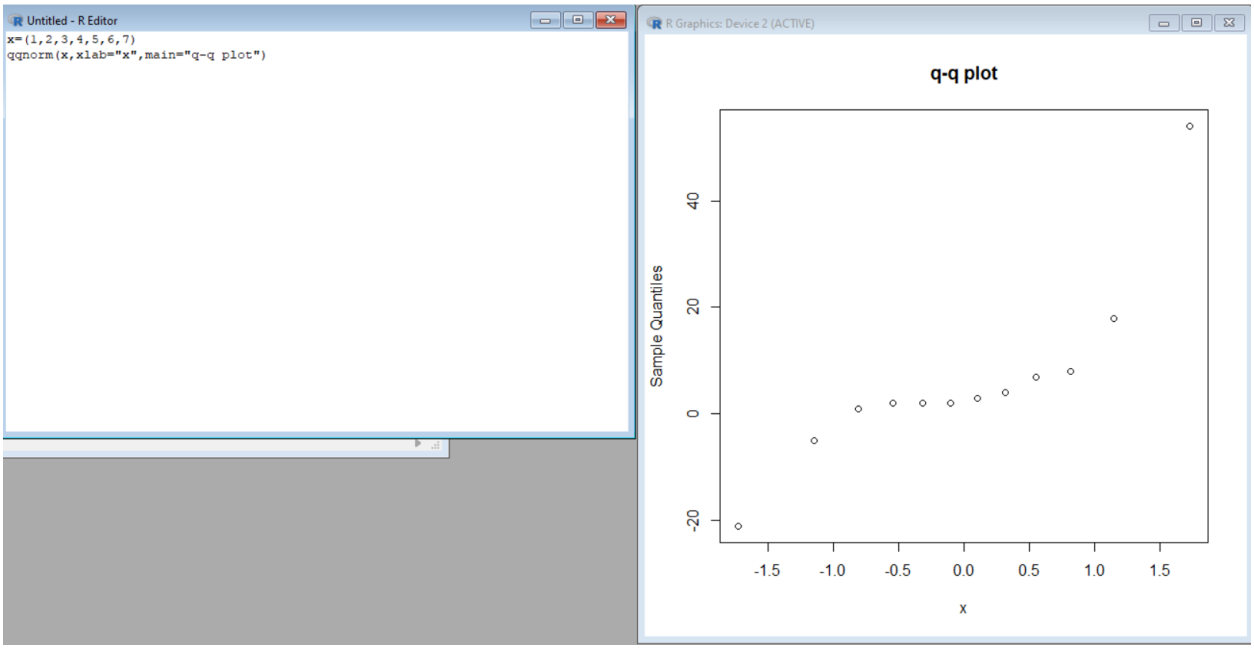
Boxplot:



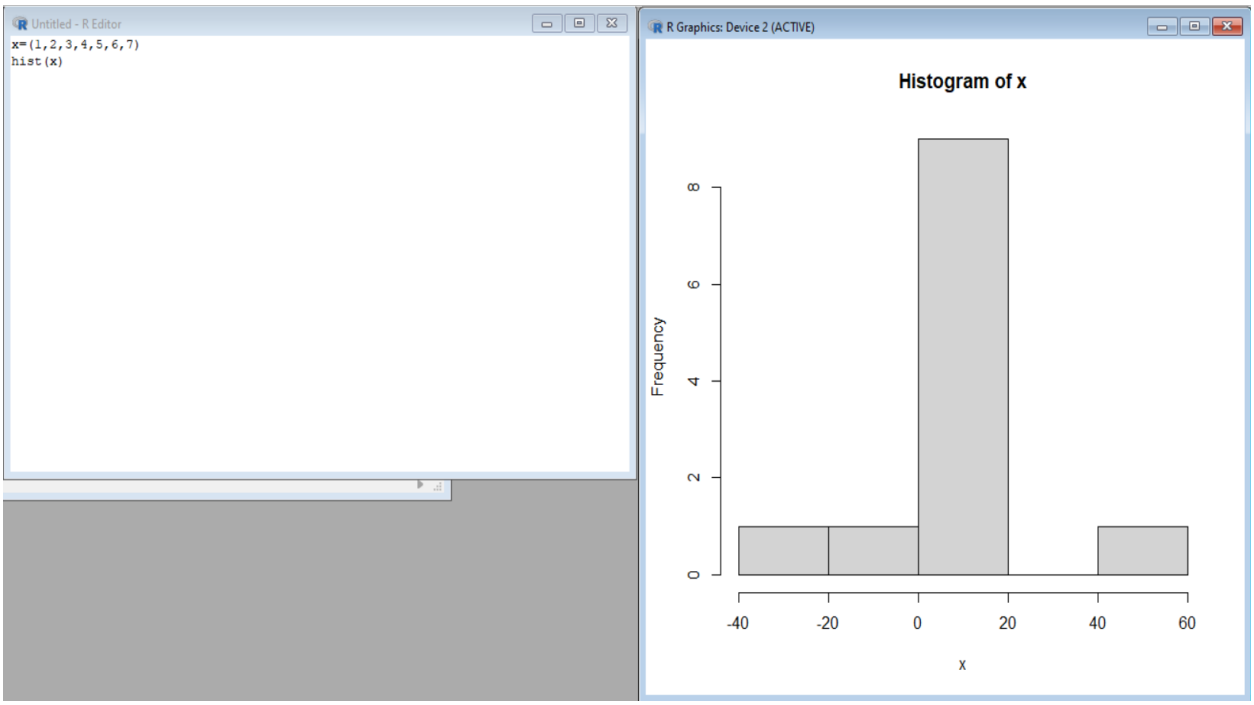
Scatter plot:



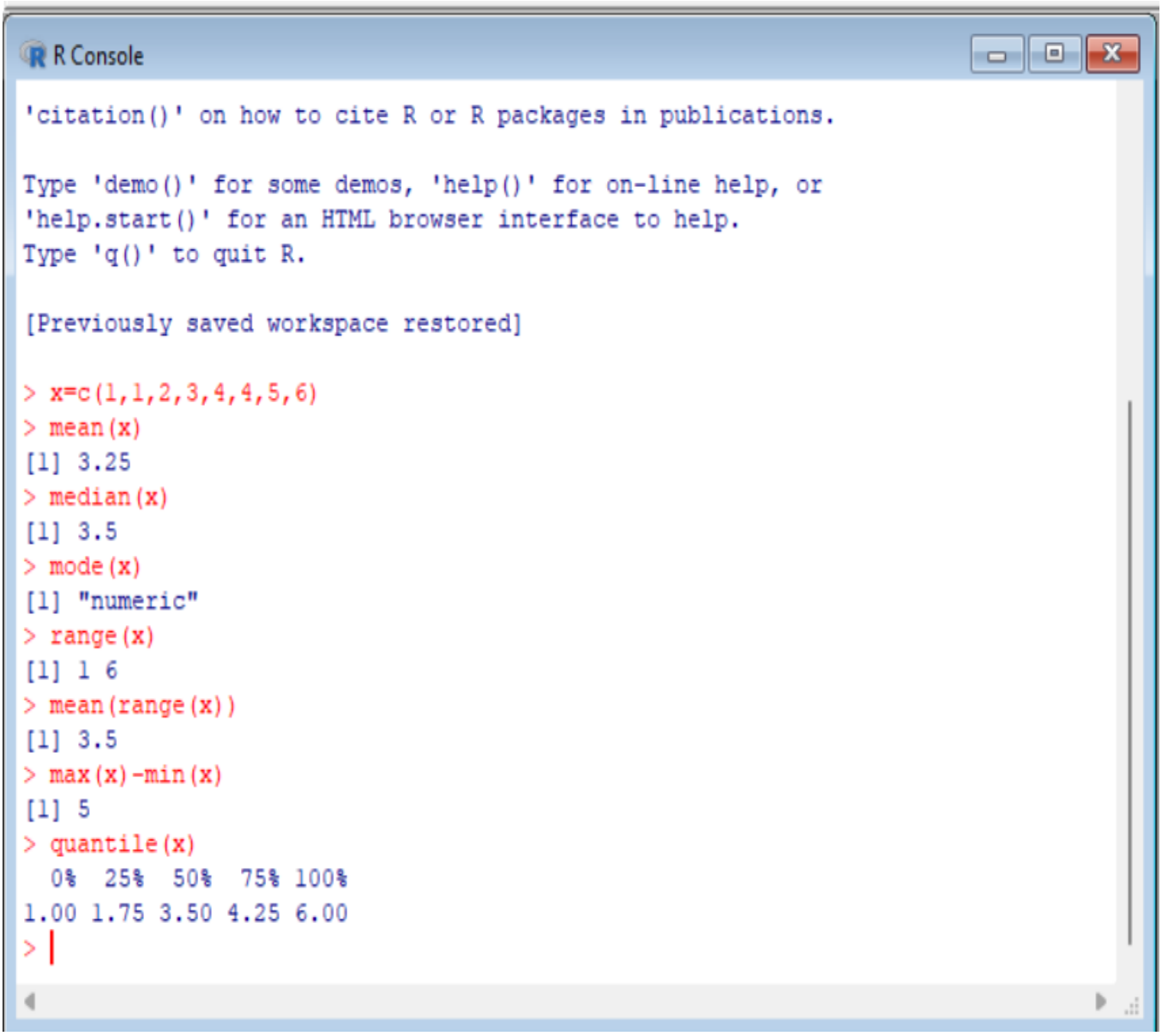
q-q plot:



HISTOGRAM:



3.CENTRAL TENDENCY AND DATA DISPERSION MEASURES USING R-TOOL.


R Console
'citation()' on how to cite R or R packages in publications.
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
[Previously saved workspace restored]
> x=c(1,1,2,3,4,4,5,6)
> mean(x)
[1] 3.25
> median(x)
[1] 3.5
> mode(x)
[1] "numeric"
> range(x)
[1] 1 6
> mean(range(x))
[1] 3.5
> max(x)-min(x)
[1] 5
> quantile(x)
0% 25% 50% 75% 100%
1.00 1.75 3.50 4.25 6.00
>

4.PERFORM CORRECTION ANALYSIS AND NORMALIZATION.

- MIN-MAX
- ZSCORE
- DECIMAL SCALING

```
> gow=c(66,50,99)
> year=c(1991,2004,2020)
> games=table(gow,year)
> games
    year
gow  1991 2004 2020
  50    0    1    0
  66    1    0    0
  99    0    0    1
> chisq.test(games)

        Pearson's Chi-squared test

data:  games
X-squared = 6, df = 4, p-value = 0.1991

Warning message:
In chisq.test(games) : Chi-squared approximation may be incorrect
> a<-c(year)
> Mean=mean(a)
> Minimum=min(year)
> Maximum=max(year)
> MinMax=(a-Minimum)/(Maximum-Minimum)
> MinMax
[1] 0.0000000 0.4482759 1.0000000
> a<-c(gow)
> Mean<-mean(a)
> Std<-sd(a)
> Zscore<-(a-Mean)/Std
> Zscore
[1] -0.2267877 -0.8671293  1.0939169
> Decimalscaling=(a/100)
> Decimalscaling
[1] 0.66 0.50 0.99
```

5. REGRESSION ANALYSIS USING R TOOL.
REGRESSION ANALYSIS: