

Question 1.11.

The following data on motor octane ratings for various gasoline blends is taken from an article in "Technometrics":

MTB > print C1

Data Display

```
C1
 88.500   95.600   88.300   94.200   89.200   93.300   89.800
 91.800   90.400   92.200   87.700   93.300   87.600   92.700
 88.300   91.800   89.600   91.600   89.300   92.200   83.400
 94.700   84.300   93.200   85.300   92.300   87.400   90.400
 89.700   91.200   86.700   91.100   86.700   91.000   87.900
 90.400   88.900   91.100   90.300   91.000   87.500   91.000
 88.200   90.300   88.600   90.100   91.200   92.600   91.600
 92.200   91.500   94.200   90.800   93.400   90.900   93.000
 89.300   89.800   90.500   90.000   88.600   87.800   88.300
 88.500   89.000   88.700   94.400   90.600   93.700   90.700
100.300   89.900   89.800   90.100   96.100   89.900   92.700
 91.100   92.700
```

MTB > stem C1

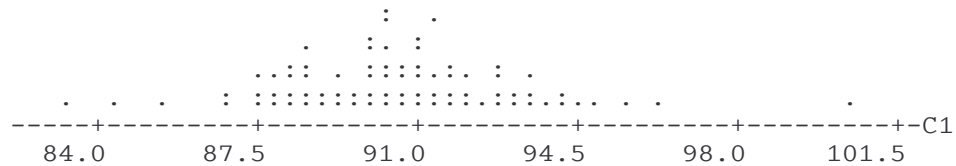
Stem-and-Leaf Display: C1

Stem-and-leaf of C1 N = 79
Leaf Unit = 0.10

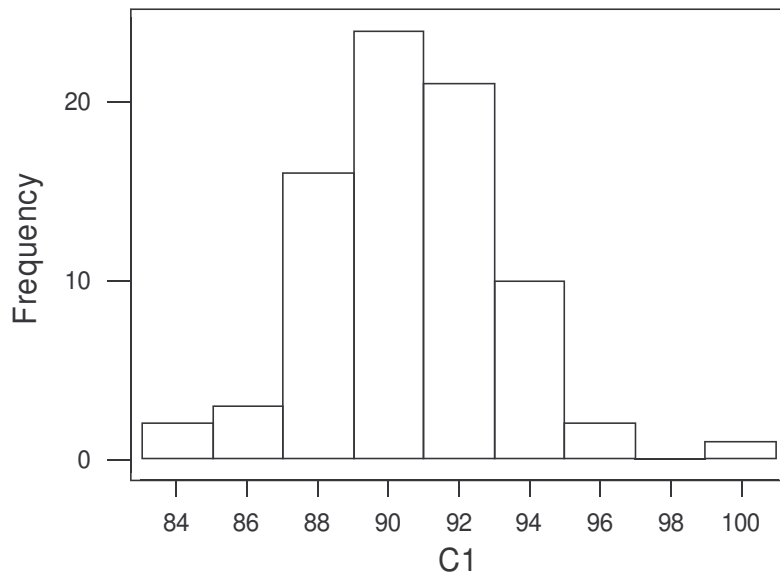
```

 1  83 4
 2  84 3
 3  85 3
 5  86 66
11  87 455689
21  88 1333555569
32  89 01335688899
(13) 90 00033444455689
34  91 0000001155588
21  92 11135666
13  93 013346
 7  94 1146
 3  95 5
 2  96 0
 1  97
 1  98
 1  99
 1 100 3
```

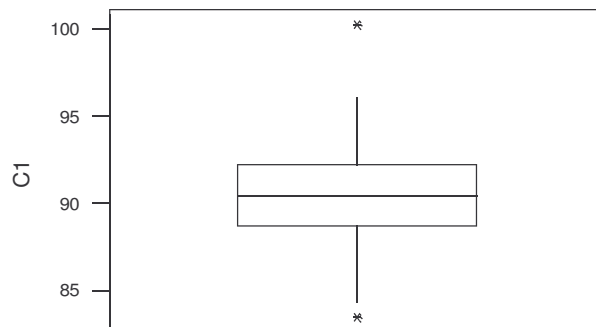
MTB > dotplots C1



MTB > histogram C1



MTB > boxplot C1



MTB > description C1

Descriptive Statistics: C1

Variable	N	Mean	Median	TrMean	StDev
C1	79	90.557	90.400	90.530	2.650
Variable	SE Mean	Minimum	Maximum	Q1	Q3
C1	0.298	83.400	100.300	88.700	92.200