IQR Problem statement

1. The Interquartile range. Compare the two Interquartile ranges.
2. Any Outlier in the Either set.

The five number summary of day and night classes is:

**Minimum Q1 Median Q3 Maximum**

**Day** 32 56 74.5 82.5 99

**Night** 25.5 78 81 89 98

**Day:**

IQR = Q3-Q1 🡪 82.5 – 56 🡪 26.5

IQR = 26.5

1.5IQRrule= 1.5 \*IQR 🡪1.5\*26.5

1.5IQRrule =39.75

Lesser = Q1-(1.5\*IQRrule) =56-39.75 🡪 16.25

Greater= Q3+(1.5\*IQRrule) = 56+82.5🡪122.25

(There is no Outliers in the Day set)

**Night:**

IQR = Q3-Q1 🡪89—78 🡪11

1.5IQRrule= 1.5 \*IQR 🡪1.5\*11

1.5IQRrule= 16.5

Lesser = Q1-(1.5\*IQRrule) = 56-16.5 🡪 39.5

Greater= Q3+(1.5\*IQRrule) =16.5+89🡪105.5

(There is a Outliers in the Night set, Minimum value 25.5 will be replaced by other relative value)