IQR-calculation

a. The interquartile range. Compare the two interquartile ranges.
b. Any outlier in either set.
   The five number, summary for the 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

Calculation:

Day:

IQR-Calculation:

IQR=Q3-Q1

=82.5-56

IQR=26.5

Lesser range outlier:

Q1-1.5*IQR

=56-1.5*26.5

=16.25

Greater range outlier:

Q3+1.5*IQR

=82.5+1.5*26.5

=122.25

Solution:

In this Day set **minimum 32, maximum 99,** but our calculation **lesser range outlier-----→ 16.25 & greater range outlier-----→122.25**

So, in this **day** dataset there is **no outlier**

Night-------→Calculation:

IQR =Q3-Q1

=89-78

IQR =11

Lesser range outlier:

Q1-1.5*IQR

=78-1.5*11

=61.5

Greater range outlier:

Q3+1.5*IQR

=89+1.5*11

=105.5

Solution:

In this night set **minimum 25.5, maximum 98,** but our calculation **lesser range outlier-----→ 61.5 & greater range outlier-----→105.5**

So, in this **night** dataset there is **no outlier**