**Lesser and Greater Outlier calculations**

A close-up of a paper

AI-generated content may be incorrect.

Let's calculate the **IQR**, **lesser outlier range**, and **upper outlier range** for both **Day** and **Night** using the provided values:

1. **Day values:**

* **Min** = 32
* **Q1** = 56
* **Median** = 74.5
* **Q3** = 82.5
* **Max** = 99

**b. Calculations:**

* **IQR (Interquartile Range)** = Q3 - Q1 = 82.5 - 56 = **26.5**
* **Lesser Outlier Range** = Q1 - 1.5 × IQR = 56 - 1.5×26.5 = 56 - 39.75 = **16.25**
* **Upper Outlier Range** = Q3 + 1.5 × IQR = 82.5 + 39.75 = **122.25**

**c.** **Outlier thresholds for Day**:

* Any value **< 16.25** is a lesser outlier → **None**, since min = 32
* Any value **> 122.25** is a greater outlier → **None**, since max = 99

1. **Night values:**

* **Min** = 25.5
* **Q1** = 78
* **Median** = 81
* **Q3** = 89
* **Max** = 98

**b. Calculations:**

* **IQR** = Q3 - Q1 = 89 - 78 = **11**
* **Lesser Outlier Range** = Q1 - 1.5 × IQR = 78 - 16.5 = **61.5**
* **Upper Outlier Range** = Q3 + 1.5 × IQR = 89 + 16.5 = **105.5**

**c. Outlier thresholds for Night:**

* Any value < 61.5 is a lesser outlier → 25.5 is an outlier
* Any value > 105.5 is a greater outlier → None, since max = 98

**Conclusion table:**

|  | **IQR** | **Lesser Outlier Threshold** | **Greater Outlier Threshold** | **Outliers** |
| --- | --- | --- | --- | --- |
| **Day** | 26.5 | 16.25 | 122.25 | None |
| **Night** | 11 | 61.5 | 105.5 | 25.5 (lesser outlier) |