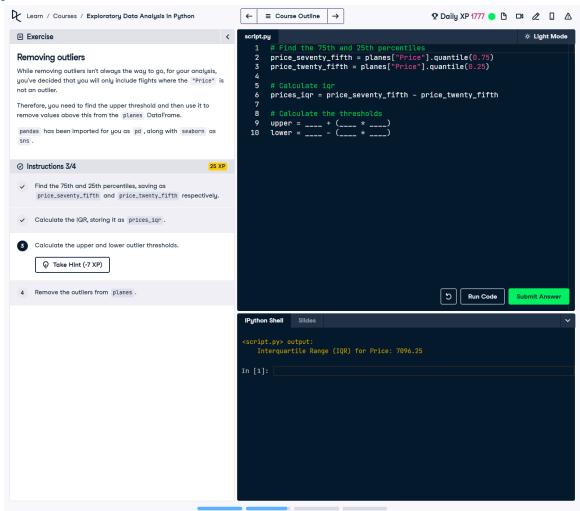
## **Calculating Thresholds Using IQR for Outlier Detection**

### **Question and Screenshot:**



# **Question Explanation:**

The task involves calculating the upper and lower thresholds for identifying outliers in the flight prices dataset. The thresholds are computed using the interquartile range (IQR) and percentiles.

#### **Code Solution:**

```
# Find the 75th and 25th percentiles
price_seventy_fifth = planes["Price"].quantile(0.75)
price twenty fifth = planes["Price"].quantile(0.25)
```

# Calculate igr

```
prices_iqr = price_seventy_fifth - price_twenty_fifth
# Calculate the thresholds
upper = price_seventy_fifth + (1.5 * prices_iqr)
lower = price_twenty_fifth - (1.5 * prices_iqr)
```

## **Solution Explanation:**

- 1. The `quantile()` function calculates the 75th and 25th percentiles of the 'Price' column.
- 2. The IQR is the difference between the 75th and 25th percentiles, representing the spread of the middle 50% of the data.
- 3. The upper threshold is computed as the 75th percentile plus 1.5 times the IQR, while the lower threshold is the 25th percentile minus 1.5 times the IOR.
- 4. These thresholds are used to identify outliers in the dataset.