In [67]: ▶
```python
import matplotlib.pyplot as plt
```

In [68]: ▶
```python
import pandas as pd
```

In [69]: ▶
```python
import numpy as np
```
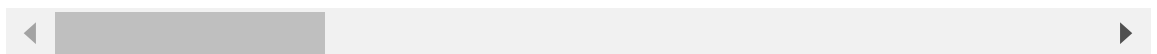
In [70]: ▶
```python
import seaborn as sns
```

In [71]: ▶
```python
bookingData=pd.read_csv(r"C:\Users\ghadi\Desktop\School\ML\booking_of_hote
```

In [72]: ▶
```python
bookingData.head(5)
```

Out[72]:

| | hotel | is_canceled | lead_time | arrival_date_year | arrival_date_month | arrival_date_week_r |
|---|---|---|---|---|---|---|
| 0 | Resort Hotel | 0 | 342 | 2015 | July | |
| 1 | Resort Hotel | 0 | 737 | 2015 | July | |
| 2 | Resort Hotel | 0 | 7 | 2015 | July | |
| 3 | Resort Hotel | 0 | 13 | 2015 | July | |
| 4 | Resort Hotel | 0 | 14 | 2015 | July | |

5 rows × 32 columns

◀                                             ▶

In [73]: ▶| `bookingData.tail()`

Out[73]:

| | hotel | is_canceled | lead_time | arrival_date_year | arrival_date_month | arrival_date_we |
|---|---|---|---|---|---|---|
| **119385** | City Hotel | 0 | 23 | 2017 | August | |
| **119386** | City Hotel | 0 | 102 | 2017 | August | |
| **119387** | City Hotel | 0 | 34 | 2017 | August | |
| **119388** | City Hotel | 0 | 109 | 2017 | August | |
| **119389** | City Hotel | 0 | 205 | 2017 | August | |

5 rows × 32 columns

◀ ▬▬▬▬ ▶
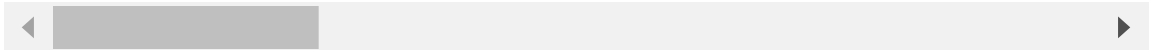
In [74]: ▶| `canc = bookingData['is_canceled'].value_counts()`

In [75]: ▶| `canc`

Out[75]:
```
0    75166
1    44224
Name: is_canceled, dtype: int64
```

In [76]: ▶| `meanAdults = bookingData['adults'].mean()`

In [77]: ▶| `print(meanAdults)`

```
1.8564033838679956
```

In [78]: ▶| `meanStays = bookingData['stays_in_week_nights'].mean()`

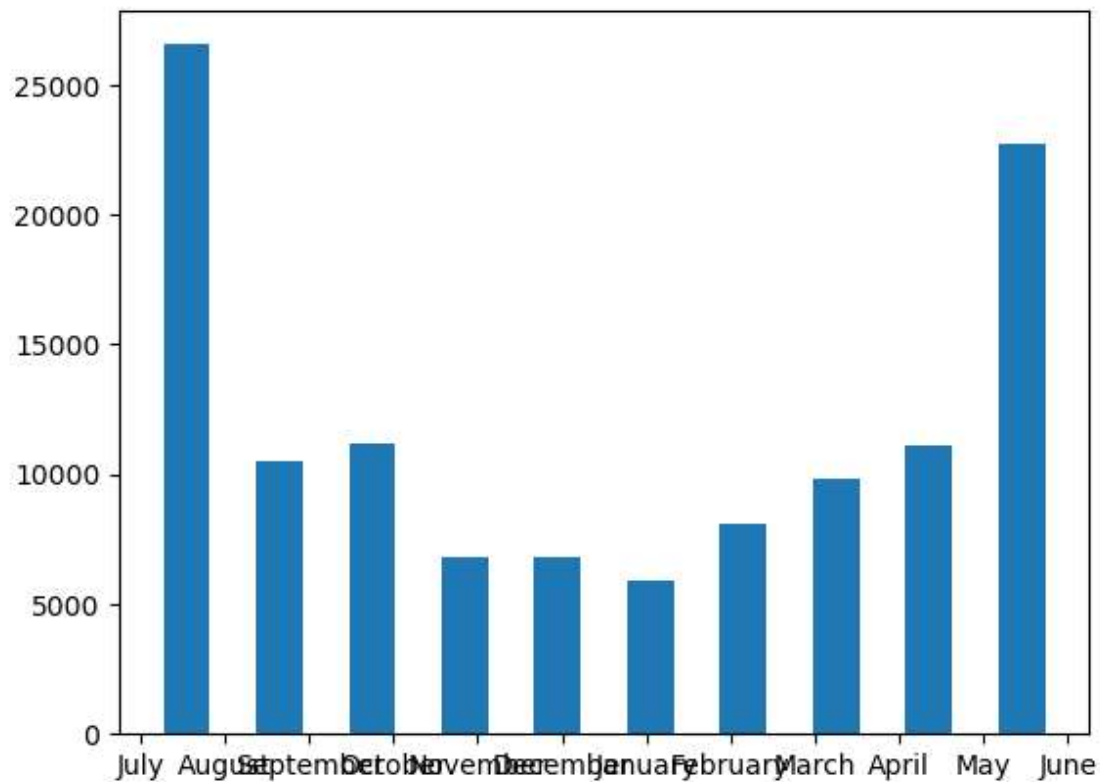In [79]: ▶| `print(meanStays)`

```
2.500301532791691
```

In [80]: ▶| `modeArrivalMonth = bookingData['arrival_date_month'].mode()`

In [81]: ▶| `print(modeArrivalMonth)`

```
0    August
Name: arrival_date_month, dtype: object
```
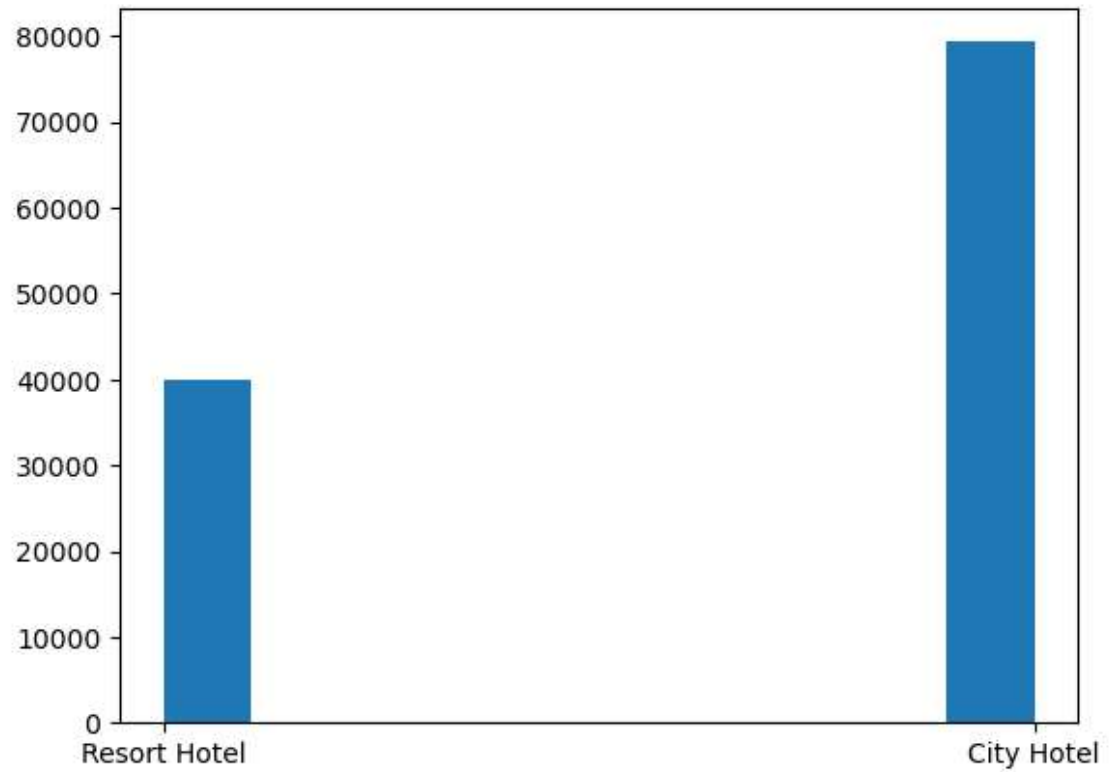
In [86]:    ▶| `plt.hist(bookingData['arrival_date_month'],rwidth=0.5)`

Out[86]:    (array([26538., 10508., 11160., 6794., 6780., 5929., 8068., 9794.,
                   11089., 22730.]),
             array([ 0. , 1.1, 2.2, 3.3, 4.4, 5.5, 6.6, 7.7, 8.8, 9.9, 11.
            ]),
             <BarContainer object of 10 artists>)

In [90]: ▶| `plt.hist(bookingData['hotel'])`

Out[90]: (array([40060.,     0.,     0.,     0.,     0.,     0.,     0.,     0.,
                     0., 79330.]),
          array([0. , 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1. ]),
          <BarContainer object of 10 artists>)



In [ ]: ▶|