**Hotel Dataset**

**Data Source: Generated for illustration purpose only**

The dataset we are using for the exercise is hotel dataset which contains information regarding occupancy of the hotels based on different attributes such as max. number of rooms available in hotel, Avg daily rate, #hotels present nearby etc.

**Definition of attributes:**

|  |  |  |
| --- | --- | --- |
| **Attribute Name** | **Definition** | **Datatype** |
| hotel\_id | Unique Idetifier of hotel | - |
| max\_rooms\_capacity | Max number of rooms in hotel | Numerical |
| building\_type | building\_type | Categorical |
| location\_type | location\_type | Categorical |
| Occupancy | Occupancy of hotel | Float |
| AvgDailyRate | Average revenue earned from room/ Number of rooms sold | Float |
| Compet\_Occupancy | Competitor occupancy | Float |
| Compet\_AvgDailyRate | Competitor Average daily rate | Float |
| PercentGovtNights | PercentGovtNights | Float |
| PercentGroupNights | PercentGroupNights | Float |
| PercentTransientNights | PercentTransientNights | Float |
| PercentBusiness | PercentBusiness | Float |
| PercentLeisure | PercentLeisure | Float |
| hotelcount1mile | Number of hotels in 1 mile | Numerical |
| hotelcount5mile | Number of hotels in 5 mile | Numerical |
| rooms1mile | Number of rooms in 1 mile | Numerical |
| rooms5mile | Number of rooms in 5 mile | Numerical |
| loyalty\_pct | Percentage booking from loyalty | Float |
| call\_center\_booking\_pct | Percentage booking from call center | Float |
| travel\_agency\_booking\_pct | Percentage booking from travel agency | Float |
| third\_party\_web\_bookings\_pct | Percentage booking from third party | Float |
| hotel\_to\_hotel\_bookings\_pct | Percentage booking from hotel-to-hotel | Float |
| direct\_call\_booking\_pct | Percentage booking from direct calls | Float |
| direct\_web\_booking\_pct | Percentage booking from web | Float |

For our first exercise, we will be using only max\_rooms\_capacity & AvgDailyRate as it is sufficient to illustrate the algorithm.

We will be referring to the hotel data set for our upcoming exercises, when there is a need to use more attributes.