AIRBNB PRICE PREDICTION

Problem Statement

 The purpose of this project is to explore the data and predict the price of an Airbnb listing from features extracted from the listings.

Data Source

- https://www.kaggle.com/stevezhenghp/airb nb-price-prediction
- Number of columns: 29
- Number of Rows: 74112
- Dataset Size: 99MB

Data Types of the Dataset variables

df.dtypes	
id	int64
log_price	float64
property_type	object
room_type	object
amenities	object
accommodates	int64
bathrooms	float64
bed_type	object
cancellation_policy	object
cleaning_fee	bool
city	object
description	object
first_review	object
host_has_profile_pic	object
host_identity_verified	object
host_response_rate	object
host_since	object
instant_bookable	object
last_review	object
latitude	float64
longitude	float64
name	object
neighbourhood	object
number_of_reviews	int64
review_scores_rating	float64
thumbnail_url	object
zipcode	object
bedrooms	float64
beds	float64
dtype: object	

Bar graph and pivot table to visualize the count of visitors for each property type



table = pd.pivot_table(df, values='id', columns=['property_type'], aggfunc='count', fill_value=0)																
table																
Apartment	Bed & Breakfast	Boat	Boutique hotel	Bungalow	Cabin	Camper/RV	Casa particular	Castle	Cave		Serviced apartment	Tent	Timeshare	Tipi	Townhouse	Train
49003	462	65	69	366	72	94	1	13	2		21	18	77	3	1692	2

Proposed Solution

- EDA will be performed through pyspark.
- Conclude whether the price of the Airbnb listing is based on the ratings or not.
- Check whether the price of the Airbnb listing is based on the property type and amenities.
- Average rating of the Airbnb listing based on the number of hosts reviewed.