

Group Name: Group 1

Group Members:

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Selected Case Study: "Outland Adventures"

Report #1: "Do enough customers buy equipment to keep equipment sales?"

We will utilize the equipmentStatus attribute of the Customer entity in the database to assess whether each customer has purchased or rented equipment. Our Python script transforms the SQL table directly and employs the Python .count() method to precisely calculate the count of customers who have purchased equipment in comparison to the total number of customers, resulting in a percentage. If less than half of the customer base has purchased equipment, we can assume that there aren't enough customers buying equipment to sustain equipment sales. Conversely, if more than half of the customers buy equipment, it indicates there are sufficient customers to sustain equipment sales.

Report #2: "Do any of the locations show a downward trend in bookings?"

By combining the destination attribute within the Customer entity with the destination ID from the destination entity, we identify which destination each customer has booked by name. Our Python script, directly manipulates the resulting SQL table. Using this approach, we calculate the count of customers who have booked each destination and estimate the results as a percentage of the total number of customers. This allows us to identify locations showing a downward trend in bookings based on these percentages.

Report #3: "Are there inventory items that are over five years old?"

We leverage the acquisitionDate attribute of the Equipment entity to determine when Outland Adventures acquired each piece of equipment. Our Python script, directly

transforms the resulting SQL table. Using Python, we filter through the equipment to display all items acquired over five years ago.

```
C:\csd\csd-310\venv\Scripts\python.exe C:\csd\csd-310\OutlandAdventureProject\outlandAdventure_3Reports_Tej.py

Database user root connected to MYSQL on host 127.0.0.1 with database OutlandAdventures

Press enter to continue...

QUERYING FOR PERCENTAGE OF EQUIPMENT PURCHASE VS RENTAL
83.33% of customers have purchased equipment.
16.67% of customers have rented equipment.

==DISPLAYING CUSTOMERS AND THEIR BOOKED DESTINATIONS==
The percentage of bookings for Africa is 33.33%.
The percentage of bookings for Asia is 50.00%.
The percentage of bookings for Europe is 16.67%.

==DISPLAYING EQUIPMENT AND THEIR ACQUISITION DATE==
('Hiking Boots', datetime.date(2010, 1, 1))
('Fishing Rod', datetime.date(2021, 1, 1))
('Backpack', datetime.date(2022, 1, 1))
('Climbing Gear Set', datetime.date(2022, 1, 1))
('Kayak', datetime.date(2020, 1, 1))
('Surfboard', datetime.date(2023, 1, 1))

==DISPLAYING EQUIPMENT OVER 5 YEARS OLD==
('Hiking Boots', datetime.date(2010, 1, 1))

Process finished with exit code 0
```