

```
1 CREATE DATABASE food_waste_management;
2
3 USE food_waste_management;
4
5
6
7 -- For the tables, I imported the required CSV files through the Import  ↗
   Flat File option
8 -- with the table names as:
9 -- dbo.claims_data, dbo.listing_data, dbo.providers_data,  ↗
   dbo.receivers_data
10
11
12
13
14 -- =====
15 -- Query 1: Provider count per city
16 -- =====
17 SELECT
18     UPPER(LTRIM(RTRIM(City))) AS City,
19     COUNT(DISTINCT Provider_ID) AS Provider_Count
20 FROM dbo.providers_data
21 GROUP BY UPPER(LTRIM(RTRIM(City)))
22 ORDER BY City;
23 GO
24
25 -- =====
26 -- Query 2: Receiver count per city
27 -- =====
28 SELECT
29     UPPER(LTRIM(RTRIM(City))) AS City,
30     COUNT(DISTINCT Receiver_ID) AS Receiver_Count
31 FROM dbo.receivers_data
32 GROUP BY UPPER(LTRIM(RTRIM(City)))
33 ORDER BY City;
34 GO
35
36 -- =====
37 -- Query 3: Total quantity per provider type
38 -- =====
39 SELECT
40     Provider_Type,
41     SUM(Quantity) AS Total_Quantity
42 FROM dbo.listing_data
43 GROUP BY Provider_Type
44 ORDER BY Total_Quantity DESC;
45 GO
46
47 -- =====
```

```
48 -- Query 4: Total claims per receiver
49 -- =====
50 SELECT
51     Receiver_ID,
52     COUNT(Claim_ID) AS Total_Claims
53 FROM dbo.claims_data
54 GROUP BY Receiver_ID
55 ORDER BY Total_Claims DESC;
56 GO
57
58 -- =====
59 -- Query 5: Total food quantity listed
60 -- =====
61 SELECT
62     SUM(Quantity) AS Total_Food_Quantity
63 FROM dbo.listing_data;
64 GO
65
66 -- =====
67 -- Query 6: Total food quantity available per provider
68 -- =====
69 SELECT
70     Provider_ID,
71     SUM(Quantity) AS Total_Food_Quantity_Available
72 FROM dbo.listing_data
73 GROUP BY Provider_ID
74 ORDER BY SUM(Quantity) DESC;
75 GO
76
77 -- =====
78 -- Query 7: Top 5 cities by total listings
79 -- =====
80 SELECT TOP 5
81     Location AS City,
82     COUNT(Food_ID) AS Total_Listings
83 FROM dbo.listing_data
84 GROUP BY Location
85 ORDER BY Total_Listings
86
87
88
89 -- =====
90 -- Query 8: Top 5 Cities with the highest number of food listings
91 -- =====
92 SELECT TOP 5
93     Location,
94     COUNT(*) AS Listing_Count
95 FROM
96     dbo.listing_data
```

```
97 GROUP BY
98     Location
99 ORDER BY
100     Listing_Count DESC;
101
102
103 -- =====
104 -- Query 9: Most commonly available food types
105 -- =====
106 SELECT
107     Food_Type,
108     COUNT(*) AS Listing_Count
109 FROM
110     dbo.listing_data
111 GROUP BY
112     Food_Type
113 ORDER BY
114     Listing_Count DESC;
115
116
117
118
119 -- =====
120 -- Query 10: Number of food claims made for each food item
121 -- =====
122 SELECT
123     Food_ID,
124     COUNT(*) AS Claim_Count
125 FROM
126     dbo.claims_data
127 GROUP BY
128     Food_ID
129 ORDER BY
130     Claim_Count DESC;
131
132
133
134 -- =====
135 -- Query 11: Percentage of food claims by status
136 -- =====
137 SELECT
138     Status,
139     COUNT(*) AS Claim_Count,
140     CAST(COUNT(*) * 100.0 / (SELECT COUNT(*) FROM dbo.claims_data) AS
        DECIMAL(5,2)) AS Percentage
141 FROM
142     dbo.claims_data
143 GROUP BY
144     Status
```

```
145 ORDER BY
146     Percentage DESC;
147
148
149 -- =====
150 -- Query 12: Average quantity of food claimed per receiver
151 -- =====
152 SELECT
153     r.Receiver_ID,
154     AVG(l.Quantity) AS Avg_Quantity_Claimed
155 FROM
156     dbo.claims_data AS c
157 JOIN
158     dbo.listing_data AS l ON c.Food_ID = l.Food_ID
159 JOIN
160     dbo.receivers_data AS r ON c.Receiver_ID = r.Receiver_ID
161 GROUP BY
162     r.Receiver_ID
163 ORDER BY
164     Avg_Quantity_Claimed DESC;
165
166
167 -- =====
168 -- Query 13: Most claimed meal type
169 -- =====
170 SELECT
171     l.Meal_Type,
172     COUNT(*) AS Claim_Count
173 FROM
174     dbo.claims_data AS c
175 JOIN
176     dbo.listing_data AS l ON c.Food_ID = l.Food_ID
177 GROUP BY
178     l.Meal_Type
179 ORDER BY
180     Claim_Count DESC;
181
182
183
184 -- =====
185 -- Query 14: Total quantity of food donated by each provider
186 -- =====
187 SELECT
188     p.Provider_ID,
189     p.Name AS Provider_Name,
190     SUM(l.Quantity) AS Total_Quantity_Donated
191 FROM
192     dbo.listing_data AS l
193 JOIN
```

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194     dbo.providers_data AS p ON l.Provider_ID = p.Provider_ID
195 GROUP BY
196     p.Provider_ID,
197     p.Name
198 ORDER BY
199     Total_Quantity_Donated DESC;
200
201
202 -- =====
203 -- Query 15: receivers by total quantity of food claimed
204 -- =====
205 SELECT
206     r.Receiver_ID,
207     r.Name AS Receiver_Name,
208     SUM(l.Quantity) AS Total_Quantity_Claimed
209 FROM
210     dbo.claims_data AS c
211 JOIN
212     dbo.listing_data AS l ON c.Food_ID = l.Food_ID
213 JOIN
214     dbo.receivers_data AS r ON c.Receiver_ID = r.Receiver_ID
215 GROUP BY
216     r.Receiver_ID, r.Name
217 ORDER BY
218     Total_Quantity_Claimed DESC
219
220 -- =====
221 -- Query 18: Monthly total claims
222 -- =====
223 SELECT
224     YEAR(Timestamp) AS Claim_Year,
225     MONTH(Timestamp) AS Claim_Month,
226     COUNT(*) AS Total_Claims
227 FROM
228     dbo.claims_data
229 GROUP BY
230     YEAR(Timestamp), MONTH(Timestamp)
231 ORDER BY
232     Claim_Year, Claim_Month;
233
234
235
```