

```

1 CREATE SCHEMA Netflix DEFAULT CHARSET utf8mb4;
2
3 USE Netflix;
4
5 CREATE TABLE ds_customer (
6 Customer_ID BIGINT NOT NULL,
7 Customer_Name VARCHAR(25),
8 Plan VARCHAR(25),
9 Signup_Date DATE,
10 First_Charge_Date DATE,
11 Cancel_Date DATE,
12 `Channel` VARCHAR(10),
13 PRIMARY KEY (Customer_ID)
14 );
15
16 CREATE TABLE ds_usage (
17 Customer_ID BIGINT NOT NULL,
18 Movie Name VARCHAR(25),
19 Movie_Genre VARCHAR(25),
20 Movie_Length DECIMAL(3,2),
21 Start_Time DATETIME,
22 End_Time DATETIME,
23 FOREIGN KEY (Customer_ID) REFERENCES ds_customer(Customer_ID)
24 );
25
26 -- Load Data In Table
27
28 LOAD DATA INFILE 'D:/Concentrix Assignment/Craft Demo- Netflix- Customer table.csv'
29 INTO TABLE ds_customer
30 FIELDS TERMINATED BY ","
31 ENCLOSED BY '"'
32 LINES TERMINATED BY '\n'
33 IGNORE 1 ROWS;
34
35
36 LOAD DATA INFILE 'D:/Concentrix Assignment/Craft Demo- Netflix- Usage table.csv'
37 INTO TABLE ds_usage
38 FIELDS TERMINATED BY ","
39 ENCLOSED BY '"'
40 LINES TERMINATED BY '\n'
41 IGNORE 1 ROWS;
42
43
44 -- Total Customer Count: 18
45 SELECT COUNT(DISTINCT Customer_ID) AS Total_Customers
46 FROM ds_customer
47 WHERE Signup_Date BETWEEN '2013-01-01' AND '2014-12-31';
48
49
50
51 -- Conversion Rate To Subscription: 55.56%
52 SELECT
53 COUNT(DISTINCT c.Customer_ID) AS Total_Customer,
54 COUNT(CASE WHEN First_Charge_Date IS NOT NULL THEN c.Customer_ID ELSE NULL END) AS
55 Converted_Customer,
56 ROUND(COUNT(CASE WHEN First_Charge_Date IS NOT NULL THEN c.Customer_ID ELSE NULL END)/
57 COUNT(DISTINCT c.Customer_ID)*100,2)
58 AS Conversion_Rate
59 FROM ds_customer c
60 WHERE c.Signup_Date BETWEEN '2013-12-01' AND '2014-12-31';
61
62 -- Churn Rate: 28%
63 WITH Cancelled_Subscription_Customer AS(
64 SELECT
65 COUNT(DISTINCT c.Customer_ID) AS Total_Customer,
66 COUNT(CASE WHEN First_Charge_Date IS NOT NULL THEN c.Customer_ID ELSE NULL END) AS
67 Converted_Customer,
68 ROUND(COUNT(CASE WHEN First_Charge_Date IS NOT NULL THEN c.Customer_ID ELSE NULL END)/
69 COUNT(DISTINCT c.Customer_ID)*100,2)
70 AS Conversion_Rate,
71 COUNT(CASE WHEN Cancel_Date IS NOT NULL THEN c.Customer_ID ELSE NULL END) AS
72 Cancelled_Subscription_Customer
73 FROM ds_customer c
74 WHERE c.Signup_Date BETWEEN '2013-12-01' AND '2014-12-31')
75 SELECT ROUND((Cancelled_Subscription_Customer/Total_Customer)*100,2) AS Churn_Rate
76 FROM Cancelled_Subscription_Customer;

```

```

73
74
75
76 -- Retention Rate: 72%
77 WITH Customer_Growth AS (
78 SELECT
79 COUNT(DISTINCT c1.Customer_ID) AS Total_Customer,
80 (COUNT(DISTINCT c1.Customer_ID) - COUNT(DISTINCT c2.Customer_ID)) AS
Customer_Available_After_Churn
81 FROM ds_customer c1
82 LEFT JOIN ds_customer c2 ON c1.Customer_ID = c2.Customer_ID AND c2.Cancel_Date BETWEEN
'2013-01-01' AND '2014-12-31'
83 WHERE c1.Signup_Date BETWEEN '2013-01-01' AND '2014-12-31')
84 SELECT
85 Total_Customer,
86 Customer_Available_After_Churn,
87 ROUND((Customer_Available_After_Churn/Total_Customer)*100,2) AS
Net Customer Growth Rate
88 FROM Customer_Growth;
89
90
91
92 -- Customer Acquisition by Channel: Direct-39%, PPC-33%, SEO-28%
93 SELECT Channel,
94 COUNT(DISTINCT Customer_ID) AS New_Customers,
95 ROUND(COUNT(DISTINCT Customer_ID) * 100.0 / (SELECT COUNT(DISTINCT Customer_ID) FROM
ds_customer),2) AS Acquisition_Percentage
96 FROM ds_customer
97 WHERE Signup_Date BETWEEN '2013-01-01' AND '2014-12-31'
98 GROUP BY Channel;
99
100
101
102 -- Average Time to Conversion:
103
104 SELECT
105 Plan,
106 ROUND(AVG(DATEDIFF(First_Charge_Date, Signup_Date)),0) AS Avg_Time_to_Conversion
107 FROM ds_customer
108 WHERE First_Charge_Date IS NOT NULL
109 GROUP BY Plan;
110
111
112
113
114 -- Conversion Rate by Plan:
115 SELECT Plan,
116 COUNT(DISTINCT Customer_ID) AS Converted_Customers,
117 ROUND(COUNT(DISTINCT Customer_ID) * 100.0 / (SELECT COUNT(DISTINCT Customer_ID) FROM
ds_customer),0
118 ) AS Conversion_Rate
119 FROM ds_customer
120 WHERE First_Charge_Date IS NOT NULL
121 AND Signup_Date BETWEEN '2013-01-01' AND '2014-12-31'
122 GROUP BY Plan;
123
124
125
126 -- Churn Rate by Plan:
127 SELECT Plan,
128 COUNT(DISTINCT Customer_ID) AS Churned_Customers,
129 ROUND(COUNT(DISTINCT Customer_ID) * 100.0 / (SELECT COUNT(DISTINCT Customer_ID) FROM
ds_customer),0) AS Churn_Rate
130 FROM ds_customer
131 WHERE Cancel_Date BETWEEN '2013-01-01' AND '2014-12-31'
132 GROUP BY Plan;
133
134
135 -- Customer Engagement by Genre:
136 SELECT u.Movie_Genre,
137 ROUND(AVG(u.Movie_Length),2) AS Avg_Movie_Length,
138 COUNT(u.Movie_Name) AS Movies_Watched
139 FROM ds_usage u
140 JOIN ds_customer c ON u.Customer_ID = c.Customer_ID
141 WHERE c.Signup_Date BETWEEN '2013-01-01' AND '2014-12-31'
142 GROUP BY u.Movie_Genre;
143

```

```

144
145
146 -- Usage Patterns over Time:
147 SELECT
148 CONCAT(LEFT(MONTHNAME(u.Start_Time),3),'-',RIGHT(YEAR(u.Start_Time),2)) AS Month_Year,
149 COUNT(u.Movie_Name) AS Movies_Watched,
150 ROUND(AVG(u.Movie_Length),2) AS Avg_Movie_Length
151 FROM ds_usage u
152 JOIN ds_customer c ON u.Customer_ID = c.Customer_ID
153 WHERE c.Signup_Date BETWEEN '2013-01-01' AND '2014-12-31'
154 GROUP BY Month_Year
155 ORDER BY Month_Year;
156
157
158
159
160 -- Usage Patterns and Movie Genres:
161 SELECT
162     u.Movie_Genre,
163     COUNT(u.Movie_Genre) AS Genre_Count
164 FROM ds_customer c
165 JOIN ds_usage u ON c.Customer_ID = u.Customer_ID
166 WHERE c.First_Charge_Date IS NOT NULL
167 GROUP BY u.Movie_Genre
168 ORDER BY Genre_Count DESC;
169
170
171 -- Plan Preferences of Retained Customers:
172 SELECT
173     c.Plan,
174     COUNT(c.Plan) AS Plan_Count
175 FROM ds_customer c
176 WHERE c.Cancel_Date IS NULL
177 GROUP BY c.Plan
178 ORDER BY Plan_Count DESC;
179
180
181
182 -- Analyze Movie Length and Frequency
183 SELECT
184     ROUND(AVG(TIME_TO_SEC(TIMEDIFF(u.End_Time, u.Start_Time)) / 3600),2) AS
185     Avg_Movie_Length_Viewed
186 FROM ds_customer c
187 JOIN ds_usage u ON c.Customer_ID = u.Customer_ID
188 WHERE c.Cancel_Date IS NULL;
189
190
191 -- Average Number of Movies Watched by Retained Customers:
192 SELECT
193     COUNT(u.Movie_Name) / COUNT(DISTINCT c.Customer_ID) AS Avg_Movies_Watched
194 FROM ds_customer c
195 JOIN ds_usage u ON c.Customer_ID = u.Customer_ID
196 WHERE c.Cancel_Date IS NULL;
197
198
199
200 -- Average Number of Movies Watched in a Day by Retained Customers:
201 SELECT
202     ROUND(AVG(Movies_Watched_Per_Day),1) AS Avg_Movies_Watched_Per_Day
203 FROM (
204     SELECT
205         c.Customer_ID,
206         DATEDIFF(u.End_Time, u.Start_Time) AS Days_Watched,
207         COUNT(u.Movie_Name) AS Movies_Watched_Per_Day
208     FROM ds_customer c
209     JOIN ds_usage u ON c.Customer_ID = u.Customer_ID
210     WHERE c.Cancel_Date IS NULL
211     GROUP BY c.Customer_ID, Days_Watched
212 ) AS subquery;
213
214
215
216
217
218
219

```

```

220 -- Usage Frequency:
221 SELECT
222     Customer_ID,
223     COUNT(*) AS Total_Views,
224     ROUND(AVG(TIME_TO_SEC(TIMEDIFF(u.End_Time, u.Start_Time)) / 3600),2) AS
        Avg_Movie_Length
225 FROM ds_usage u
226 GROUP BY Customer_ID
227 ORDER BY Avg_Movie_Length;
228
229
230
231 -- Plan Preference by Signup Customer
232 SELECT
233     Plan,
234     COUNT(*) AS Customer_Count
235 FROM ds_customer
236 GROUP BY Plan;
237
238
239
240 -- Cancellation Rate and Reasons:
241 SELECT
242     COUNT(DISTINCT CASE WHEN Cancel_Date IS NULL AND First_Charge_Date IS NOT NULL
        THEN Customer_ID END) AS Canceled_Customers,
243     COUNT(DISTINCT CASE WHEN Cancel_Date IS NOT NULL AND Plan = 'Streaming' THEN
        Customer_ID END) AS Canceled_Streaming_Customers,
244     COUNT(DISTINCT CASE WHEN Cancel_Date IS NOT NULL AND Plan = 'Mail' THEN
        Customer_ID END) AS Canceled_Mail_Customers,
245     COUNT(DISTINCT CASE WHEN Cancel_Date IS NOT NULL AND Plan = 'Both' THEN
        Customer_ID END) AS Canceled_Both_Customers
246 FROM ds_customer;
247
248
249
250 -- Channel Performance:
251 SELECT
252     Channel,
253     COUNT(*) AS Customer_Count,
254     COUNT(DISTINCT CASE WHEN First_Charge_Date IS NOT NULL THEN Customer_ID END) AS
        Converted_Customers
255 FROM ds_customer
256 GROUP BY Channel;
257
258
259
260 -- Customer Growth by Date
261 SELECT
262     CONCAT(RIGHT(Signup_Date,2),"th ",LEFT(MONTHNAME(Signup_Date),3)) AS By_Date,
263     COUNT(*) AS Number_Of_Customer_Signup,
264     ROUND((COUNT(*) / COUNT(*) OVER (ORDER BY Signup_Date))*100,0) AS Acquisition_Rate
265 FROM ds_customer
266 GROUP BY Signup_Date
267 ORDER BY Signup_Date;
268
269

```