Exercise Sheet 4

1 Exercises

1. Using the Invoice table, find the number of invoices each customer has and filter for customers that don't have exactly 7 invoices.

2. Using the InvoiceLine table, find the number of unique tracks purchased by each customer. Are there any customers who did not purchase exactly 38 tracks?

3. Are there any customers who purchased a track more than once?

2 Sample Solutions

1. SELECT "CustomerId",
   COUNT(1) AS num_invoices
   FROM "Invoice"
   GROUP BY "CustomerId"
   HAVING COUNT(1) != 7;

2. SELECT iv."CustomerId",
   COUNT(DISTINCT "TrackId") AS unique_tracks_purchased
   FROM "InvoiceLine" ivl
   JOIN "Invoice" iv
   ON ivl."InvoiceId" = iv."InvoiceId"
   GROUP BY "CustomerId"
   HAVING COUNT(DISTINCT "TrackId") != 38;

3. SELECT iv."CustomerId", COUNT(DISTINCT "TrackId") AS unique_tracks_purchased,
   COUNT("TrackId") AS tracks_purchased FROM "InvoiceLine" ivl JOIN "Invoice" iv ON
   ivl."InvoiceId" = iv."InvoiceId" GROUP BY "CustomerId" HAVING COUNT(DISTINCT
   "TrackId") != COUNT("TrackId");