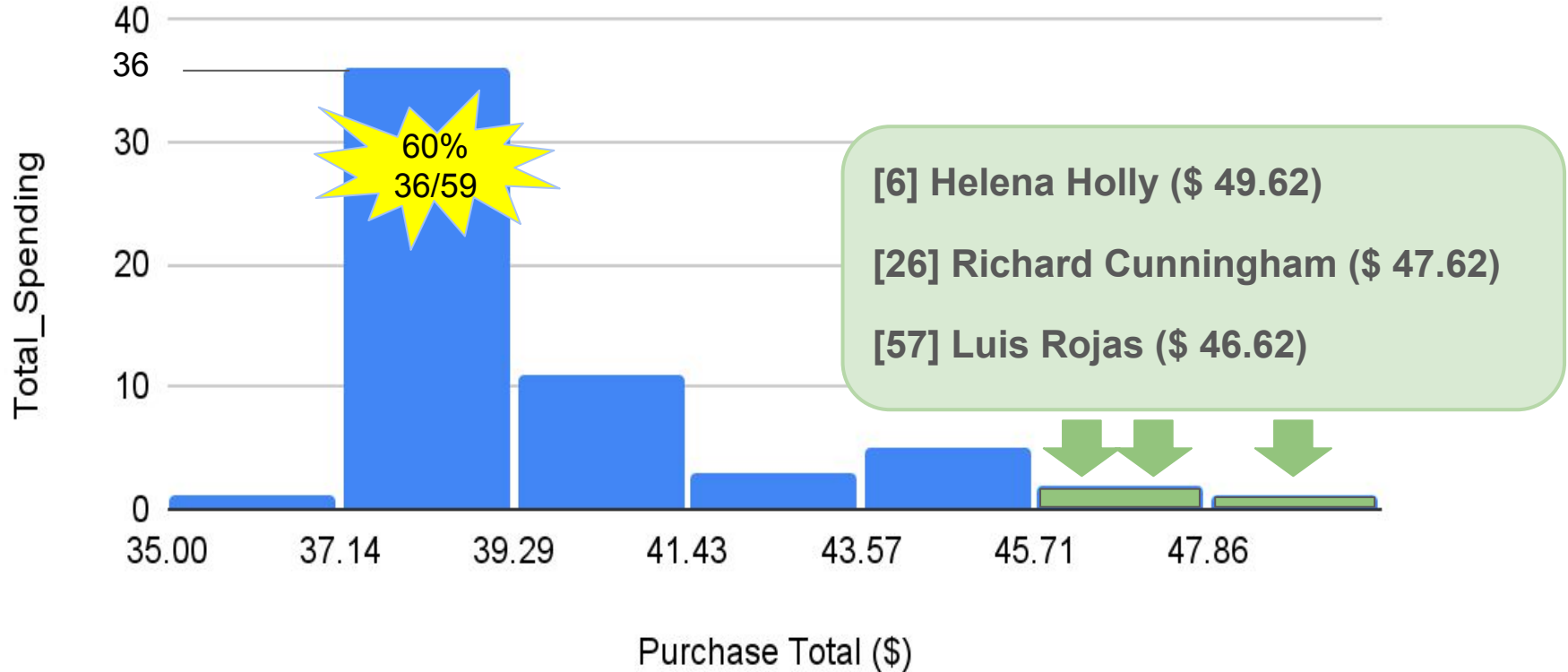


Chinook

# D1: Distribution of Purchase Totals for Each Customer



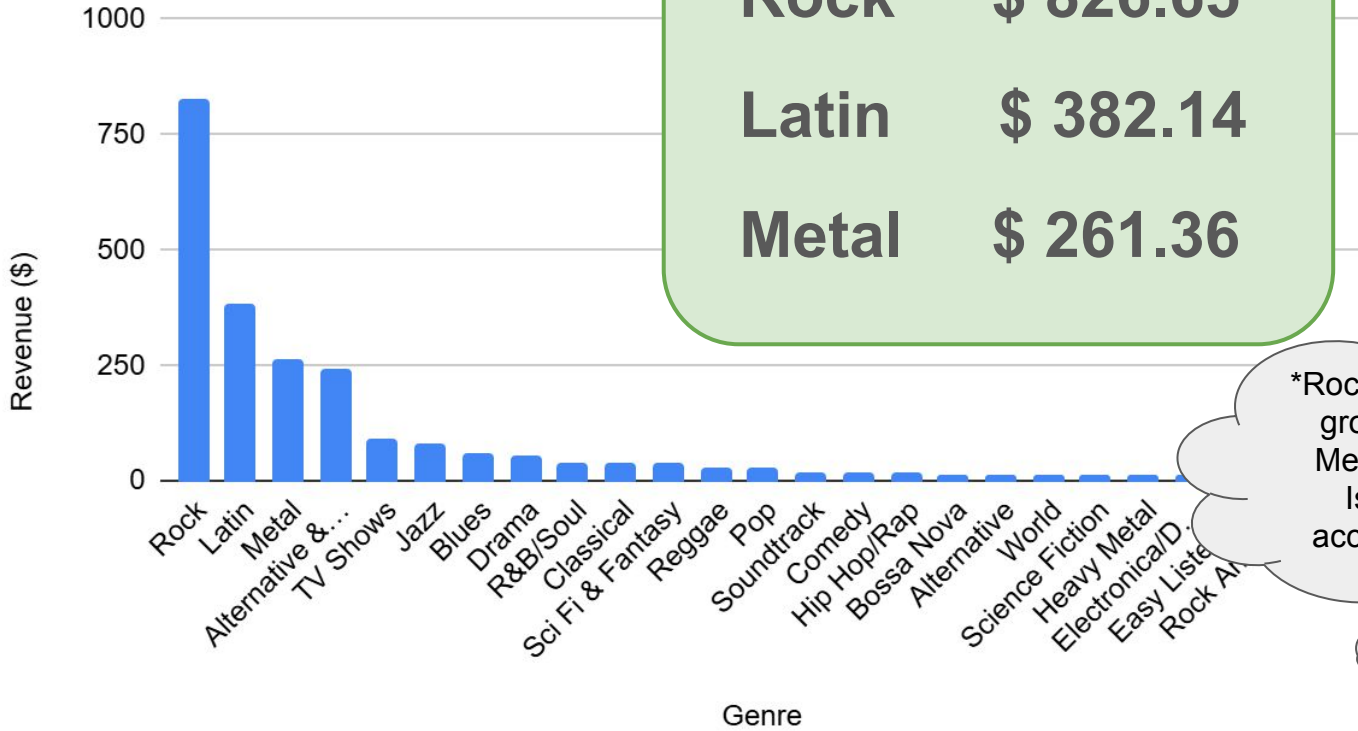
-- Find the top customers

```
SELECT c.customerId, c.FirstName, c.LastName, SUM(i.Total) AS Total_Spending
FROM customers c
LEFT JOIN invoices i
ON c.CustomerId = i.CustomerId
GROUP BY c.CustomerId
ORDER BY Total_Spending DESC
LIMIT 3
```

	CustomerId	FirstName	LastName	Total_Spending
1	6	Helena	Holý	49.62
2	26	Richard	Cunningham	47.62
3	57	Luis	Rojas	46.62

## D2: Top 3 Revenue-Generating Genres

Revenue for Each Genre



**Rock\***    \$ 826.65

**Latin**       \$ 382.14

**Metal**      \$ 261.36

\*Rock is normally a parent group for Rock & Roll, Metal, Alternative, etc..  
Is the Rock title an accurate genre name.?

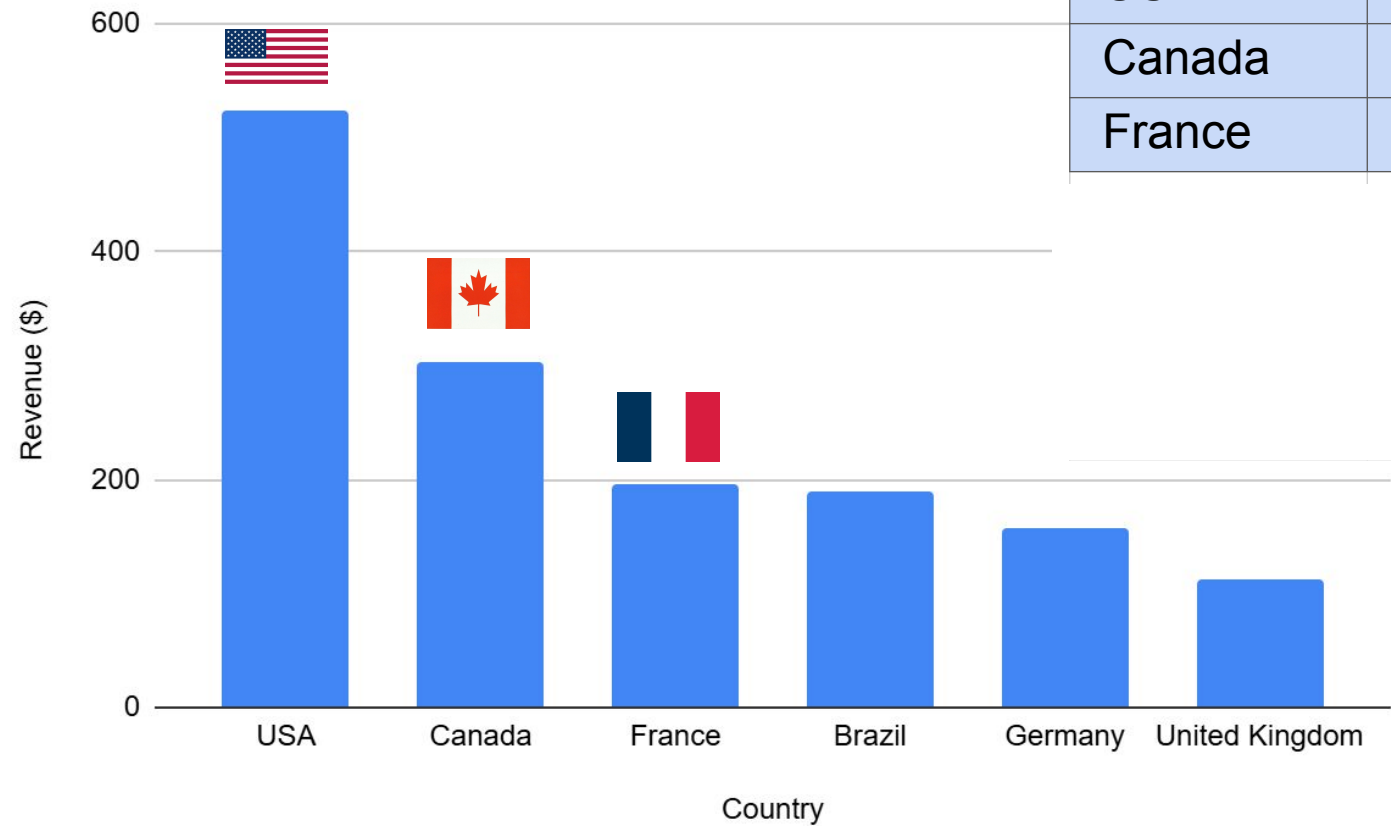
```
SELECT g.Name, SUM(i.UnitPrice*i.Quantity) AS Revenue
FROM genres g
LEFT JOIN Tracks t
ON g.genreId = t.genreId
LEFT JOIN invoice_items i
ON t.trackId = i.trackId
GROUP BY g.genreId
ORDER BY Revenue DESC
LIMIT 3
```

---

	Name	Revenue
1	Rock	826.65
2	Latin	382.14
3	Metal	261.36

Deleted the limit, to produce graph and give context

# D3: Top 3 Revenue by Country



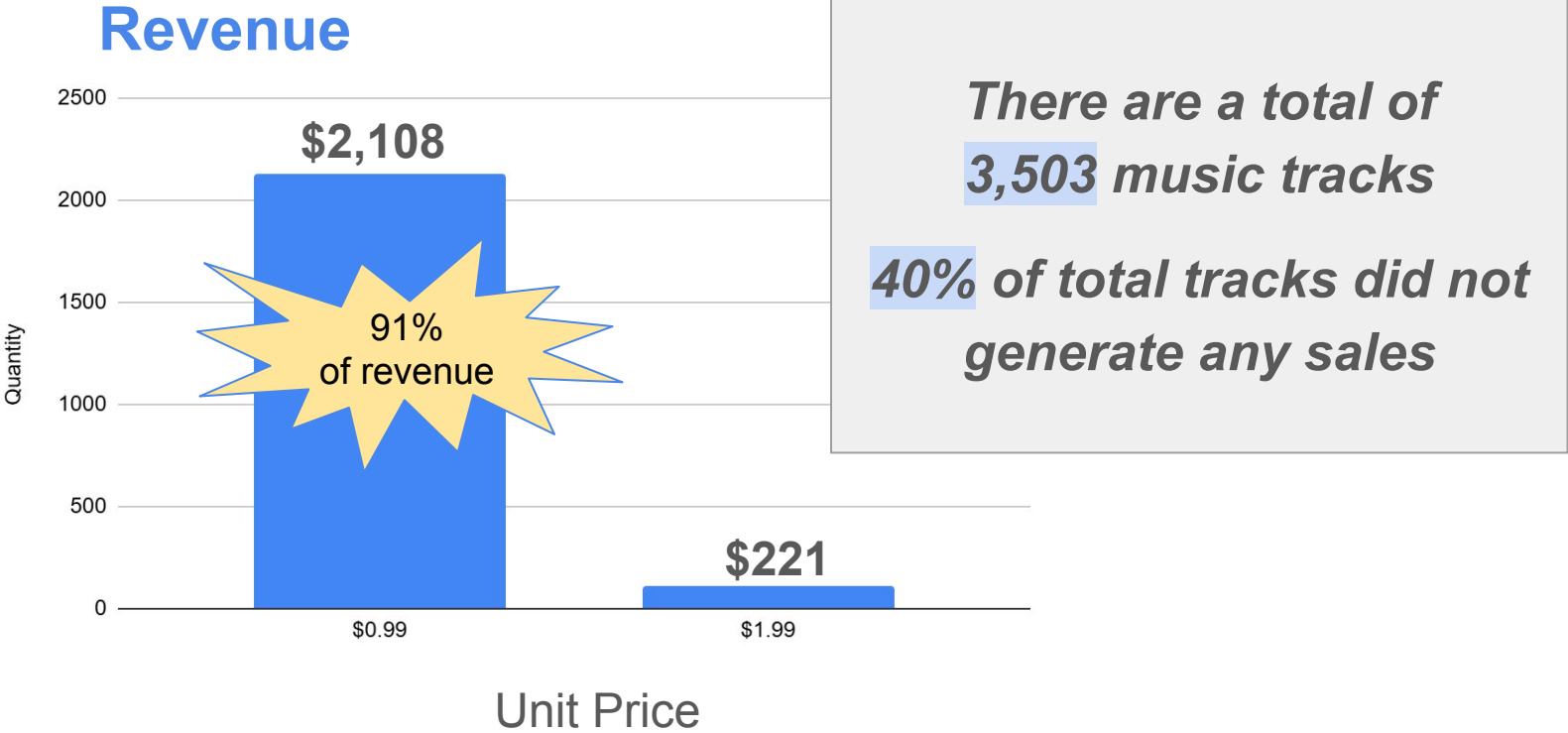
Country	Total Revenue (\$)
USA	523.06
Canada	303.96
France	195.10

-- Analyze Revenue by Country Above Average

```
SELECT BillingCountry, SUM(Total) AS TotalRevenue_By_Country
FROM invoices
GROUP BY BillingCountry
-- Choosing only countries that have a total revenue larger than the average
HAVING TotalRevenue_By_Country > (
-- Average per country
SELECT AVG(TotalRevenue_By_Country) AS AVGRRevenue_By_Country
FROM
-- Revenue per country
(
SELECT BillingCountry, SUM(Total) AS TotalRevenue_By_Country
FROM Invoices
GROUP BY BillingCountry))
ORDER BY TotalRevenue_By_Country DESC
```

	BillingCountry	TotalRevenue_By_Country
1	USA	523.06
2	Canada	303.96
3	France	195.1
4	Brazil	190.1
5	Germany	156.48
6	United Kingdom	112.86

# D4: Track Unit Price Analysis





-- How much revenue did the \$0.99 tracks bring in vs the \$1.99

```
SELECT t.UnitPrice, SUM(t.Quantity), SUM(t.UnitPrice* t.Quantity) AS Revenue  
FROM invoice_items t  
GROUP BY t.UnitPrice
```

UnitPrice	SUM(t.Quantity)	Revenue
0.99	2129	2107.71
1.99	111	220.89

```
-- Identify customers with high frequency but Low spending and low frequency but high spending.
```

```
SELECT c.CustomerId , c.FirstName, c.LastName,
       SUM(i.Total) AS Customer_Total,
       COUNT(i.invoiceId) AS Purchase_Count,
CASE
  WHEN COUNT(invoiceId) > (SELECT AVG(CountPerCustomer) FROM
    (SELECT COUNT(invoiceId) AS CountPerCustomer FROM invoices GROUP BY customerId))
  AND SUM(i.Total) < (SELECT AVG(TotalPerCustomer) FROM
    (SELECT SUM(Total) AS TotalPerCustomer FROM invoices GROUP BY customerId))
  THEN 'High Frequent Low Spending'
  WHEN COUNT(invoiceId) < (SELECT AVG(CountPerCustomer) FROM
    (SELECT COUNT(invoiceId) AS CountPerCustomer FROM invoices GROUP BY customerId))
  AND SUM(i.Total) > (SELECT AVG(TotalPerCustomer) FROM
    (SELECT SUM(Total) AS TotalPerCustomer FROM invoices GROUP BY customerId))
  THEN 'High Frequent Low Spending'
END AS Customer_Segment
FROM invoices i
LEFT JOIN customers c
ON i.customerId = c.customerId
GROUP BY i.customerId
```

## Partial SQL Result

CustomerId	FirstName	LastName	Customer_Tot	Purchase_Count	Customer_Segment
1	Luis	Gonçalves	39.62	7	NULL
2	Leonie	Köhler	37.62	7	High Frequent Low Spending
3	François	Tremblay	39.62	7	NULL
4	Bjørn	Hansen	39.62	7	NULL
5	František	Wichterlová	40.62	7	NULL
6	Helena	Holý	49.62	7	NULL
7	Astrid	Gruber	42.62	7	NULL
8	Daan	Peeters	37.62	7	High Frequent Low Spending
9	Kara	Nielsen	37.62	7	High Frequent Low Spending
10	Eduardo	Martins	37.62	7	High Frequent Low Spending
11	Alexandre	Rocha	37.62	7	High Frequent Low Spending
12	Roberto	Almeida	37.62	7	High Frequent Low Spending
13	Fernanda	Ramos	37.62	7	High Frequent Low Spending
14	Mark	Philips	37.62	7	High Frequent Low Spending
15	Jennifer	Peterson	38.62	7	High Frequent Low Spending
16	Frank	Harris	37.62	7	High Frequent Low Spending
17	Jack	Smith	39.62	7	NULL
18	Michelle	Brooks	37.62	7	High Frequent Low Spending
19	Tim	Goyer	38.62	7	High Frequent Low Spending
20	Dan	Miller	39.62	7	NULL
21	Kathy	Chase	37.62	7	High Frequent Low Spending

**5th deliverable** was not pursued. This query did not produce any significant results. This was due to 58/59 customers purchased 7 times. One customer purchased 6 times. Also, the range of totals for each customer was fairly close at \$36.64 to \$49.62.