

# Query Digital Music Store DB

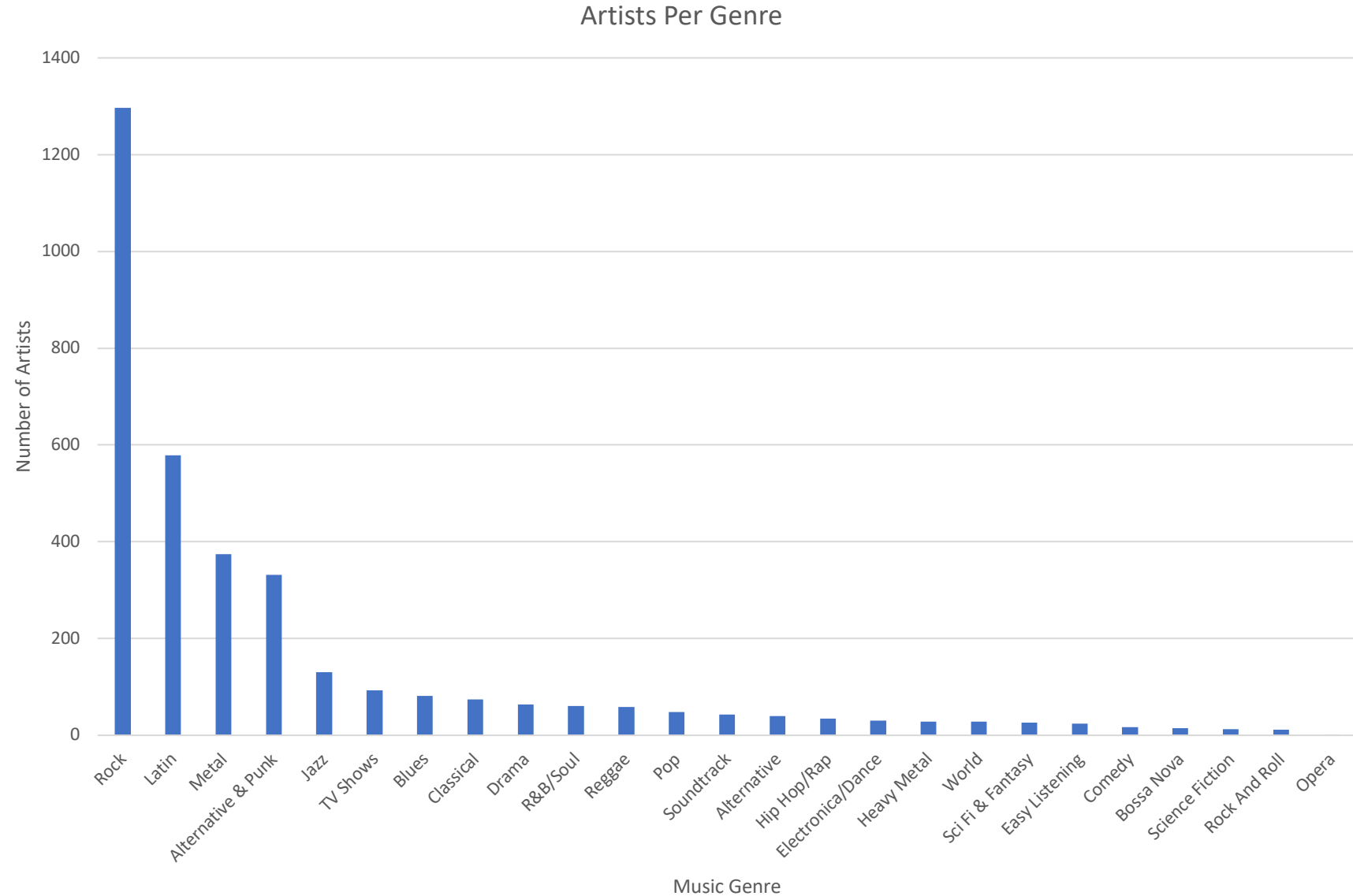
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In this presentation, the following questions will be answered by querying an SQL database

- How many artists belong to each genre? Which genres have the most artists?
- What was the most bought Media type?
- Which employee brought in the most profit?
- Which genre of music do customers buy the most of?

# How many artists belong to each genre? Which genres have the most artists?

We can see from the graph a large majority of artist belong to the rock genre, with Latin coming in at a distant second. It should be kept in mind that artist may have been assigned to multiple genres

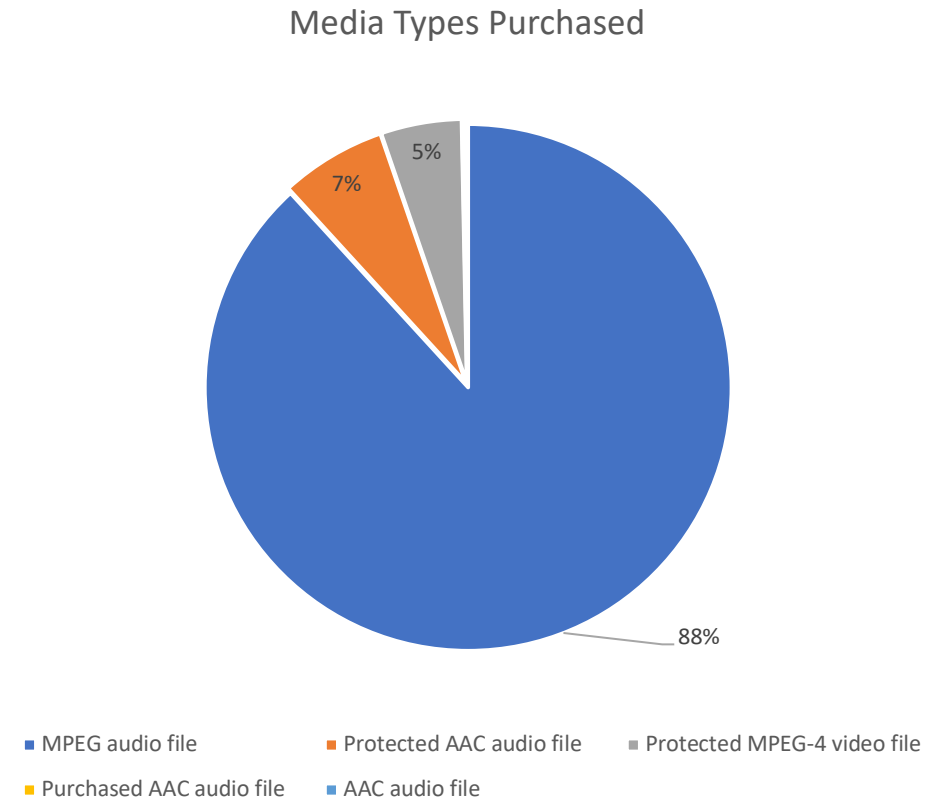


# Corresponding SQL Query

```
SELECT g.Name Genre, COUNT(*)  
FROM Artist ar  
JOIN Album al  
ON ar.ArtistId = al.ArtistId  
JOIN Track t  
ON t.AlbumId = al.AlbumId  
JOIN Genre g  
ON t.GenreId = g.GenreId  
GROUP BY 1  
ORDER BY 2 DESC;
```

# What was the most bought Media type?

The pie chart shows that by far, the most purchased media format was overwhelmingly MPEG audio. It should be noted that this table differentiates between Protected AAC, Purchased AAC, and AAC audio

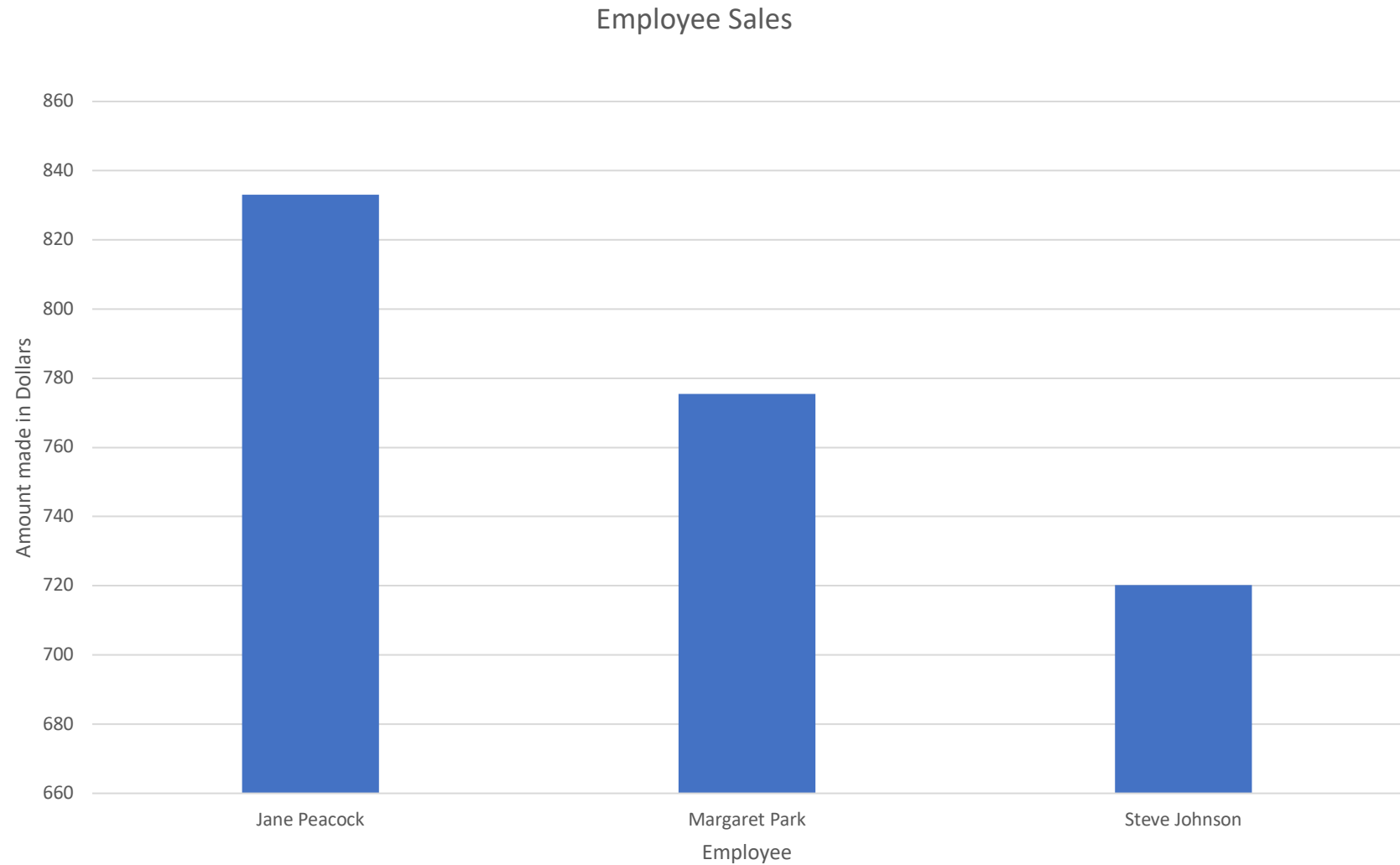


# Corresponding SQL Query

```
SELECT m.Name, COUNT(i.InvoiceId) invoice_count  
FROM MediaType m  
JOIN Track t  
ON m.MediaTypeId = t.MediaTypeId  
JOIN InvoiceLine il  
ON t.TrackId = il.TrackId  
JOIN Invoice I  
ON il.InvoiceId = i.InvoiceId  
GROUP BY 1  
ORDER BY 2 DESC;
```

# Which employee brought in the most profit?

According to this graph, Jane peacock brought in the most sales, followed closely by Margaret, then Steve



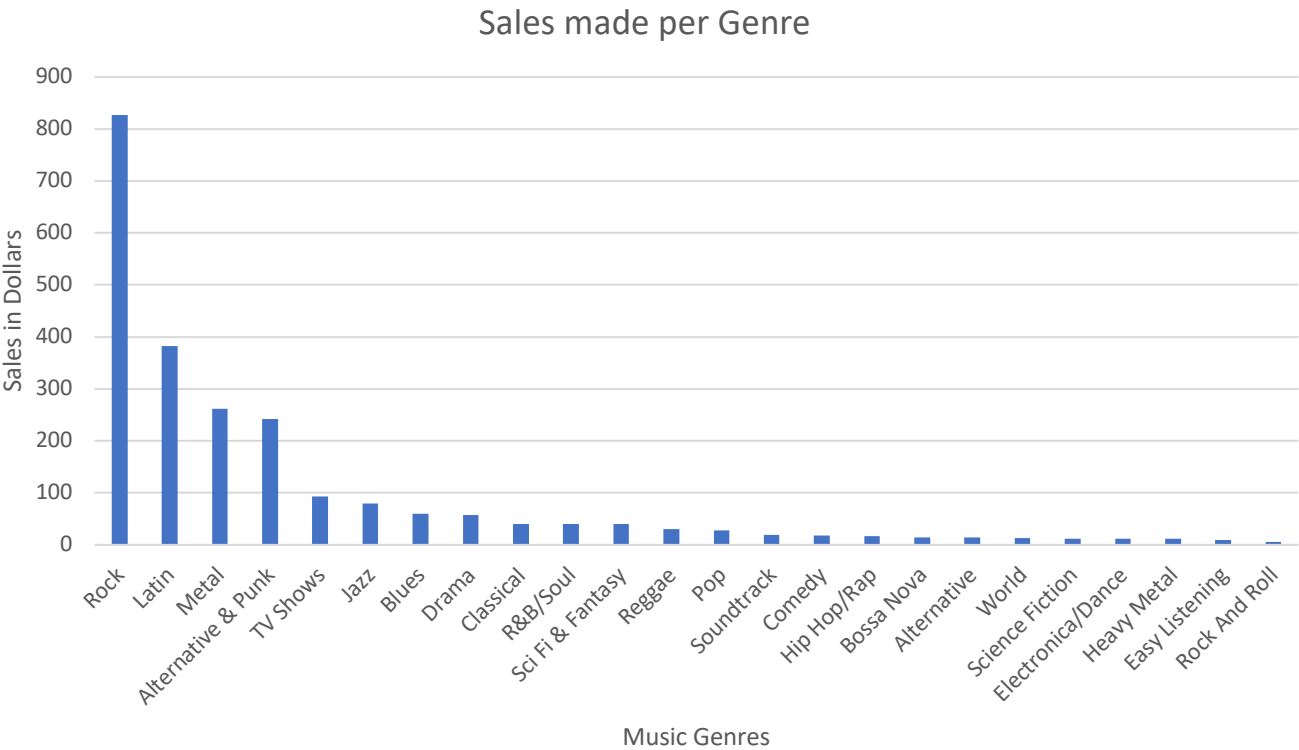
# Corresponding SQL Query

```
SELECT e.EmployeeId, e.FirstName || ' ' || e.LastName EmployeeFullName,  
SUM(i.Total) total_sales  
FROM Employee e  
JOIN Customer  
ON e.EmployeeId = c.SupportRepId  
JOIN Invoice I  
ON c.CustomerId = i.CustomerId  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```



# Which genre of music did customers buy the most of?

From the corresponding graph we can see the Rock genre had the most purchases which is consistent with the analysis that most artists were listed as being part of the Rock genre.



# Corresponding SQL Query

```
SELECT g.name, SUM(il.unitprice * il.quantity) AS total  
FROM Genre g  
JOIN Track t  
ON g.GenreId = t.GenreId  
JOIN InvoiceLine il  
ON t.TrackId = il.TrackId  
GROUP BY 1  
ORDER BY 2 DESC;
```