

Question 1: What were the sales for each Genre in France? What was the percentage contribution for each Genre? **(SQL 1)**; How do the Genre sales compare with each other? **(SQL 2)**

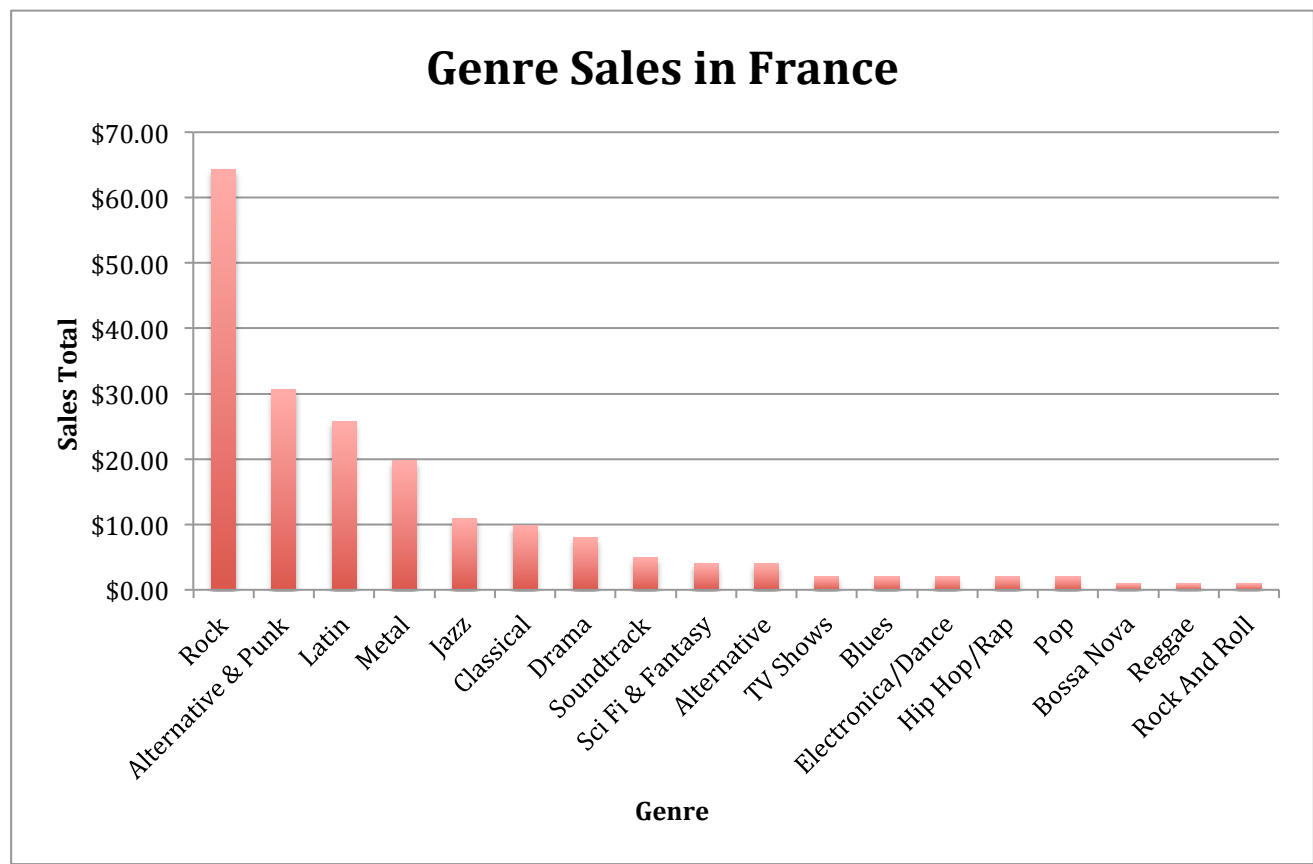


Figure 1.1: Genre Sales in France

	Country	Genre_Name	Genre_Total	Contribution_Percentage
1	France	Rock	64.35	32.9830855971297
2	France	Alternative & Punk	30.69	15.7303946694003
3	France	Latin	25.74	13.1932342388519
4	France	Metal	19.8	10.1486417221937
5	France	Jazz	10.89	5.58175294720656
6	France	Classical	9.9	5.07432086109687
7	France	Drama	7.96	4.07995899538698
8	France	Soundtrack	4.95	2.53716043054844
9	France	Sci Fi & Fantasy	3.98	2.03997949769349
10	France	Alternative	3.96	2.02972834443875
11	France	TV Shows	1.99	1.01998974884675
12	France	Blues	1.98	1.01486417221937
13	France	Electronica/Dance	1.98	1.01486417221937
14	France	Hip Hop/Rap	1.98	1.01486417221937
15	France	Pop	1.98	1.01486417221937
16	France	Bossa Nova	0.99	0.507432086109687
17	France	Reggae	0.99	0.507432086109687
18	France	Rock And Roll	0.99	0.507432086109687

Table 1a: Genre Sales in France and its percentage sales contribution

Conclusion: We can see that Rock has the highest sales out of all the other genres in France and Bossa Nova, Reggae, and Rock & Roll have the lowest sale. It’s easier to see how much each genre contributes to the overall sales in France by looking at percentages.

We see that Rock makes up about 33% of the overall sales and that Bossa Nova, Reggae and Rock & Roll make up .5% of the overall sales contribution. There’s a better visualization of the percentages shown in Figure 1.2.

Percentage Contribution of Each Genre

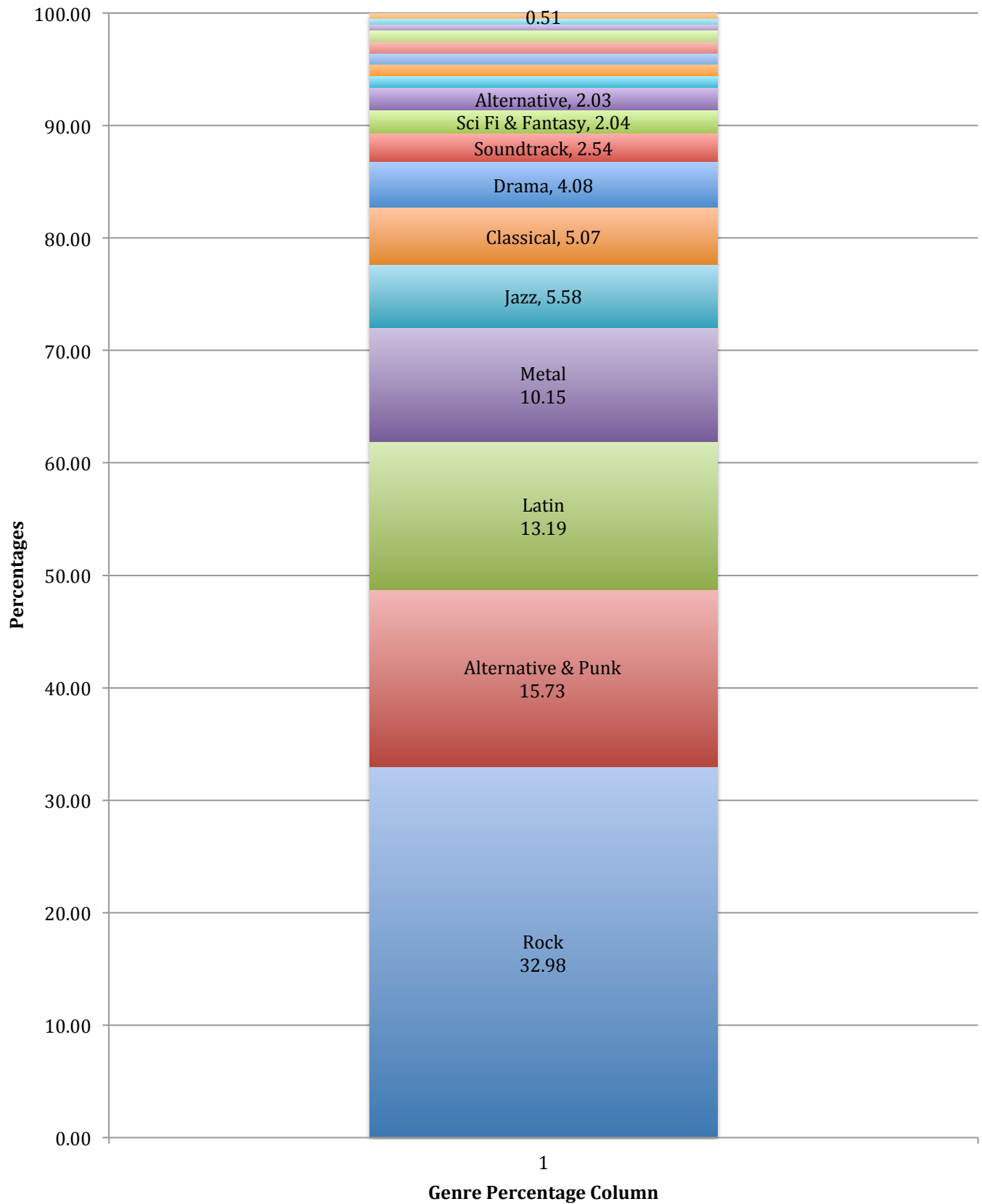


Figure 1.2: Percentage Contribution of Genre Sales in France

Average_Genre	
1	10.83888888888889

Table 1b: Average of all Genre Sales

The average of the overall genre sales in France is about \$10.84. We see that only 5 out of the 18 genres have sales above the average, which are: Rock, Alternative & Punk, Latin, Metal and Jazz.

Question 2:

What were Canada's yearly sales? (SQL 3)

Year	Sales
2009	59.4
2010	78.26
2011	53.46
2012	42.57
2013	72.27

Table 2a: Canada's Yearly Sales
(SQL solution)

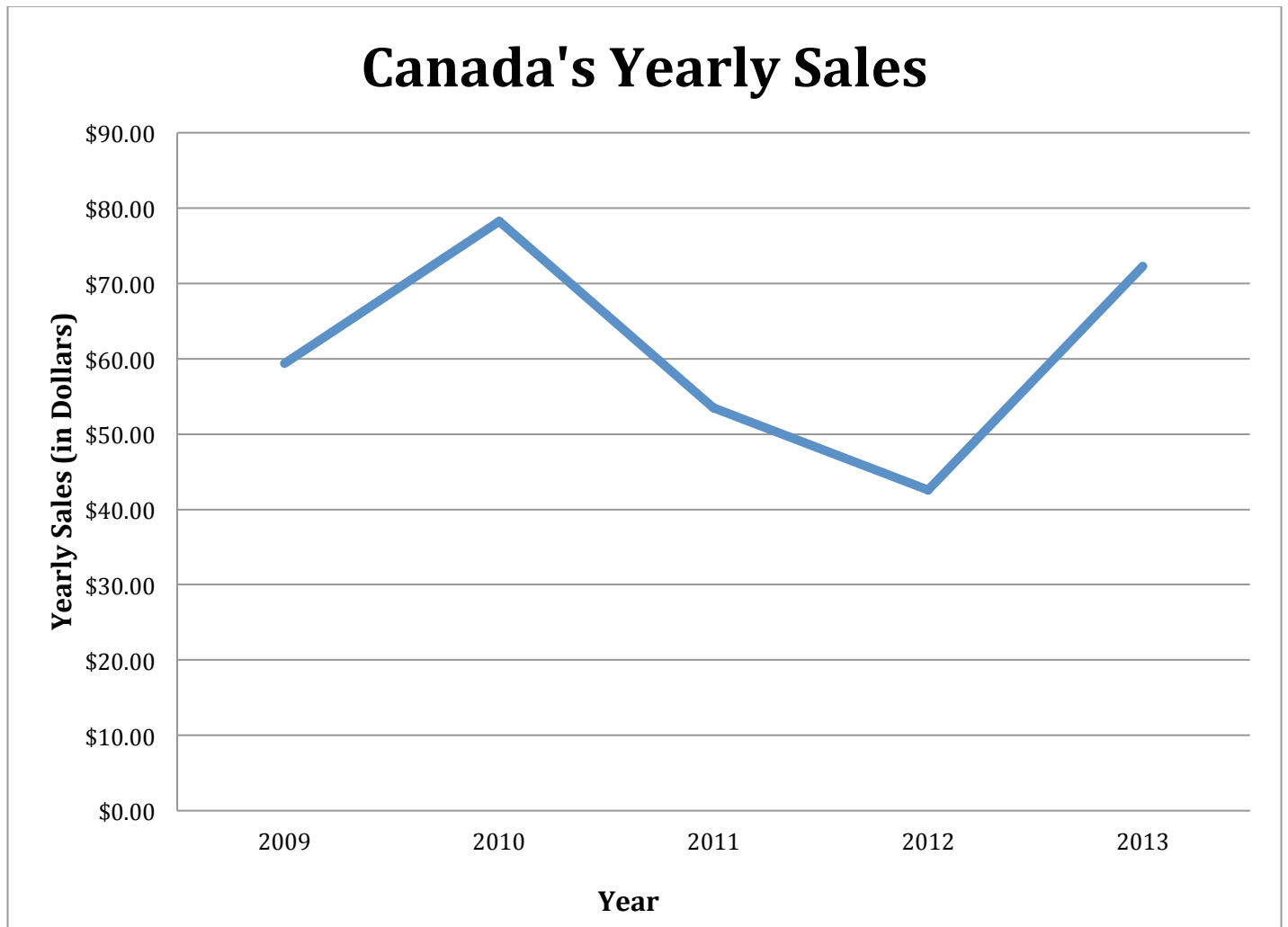


Figure 2.1: Canada's Yearly Sales Trend

Conclusion: Based on Table 2a, Canada's yearly sales are not consistent: sales hit its highest peak from \$59.40 to \$78.26 from 2009 to 2010 before it goes back down to low 50 in 2011, hit another low dip in 2012 before sales went up in 2013 with \$72.27. This can be visualized in Figure 2.1. The sales seems to decrease in the years 2010-2012

In reality, sales numbers are usually much higher. It could be that this database query is not suitable for yearly sales analysis.

Question 3: What are the overall monthly sales of Rock music in 2013 throughout the world? (SQL 4)

Month	Sales
March	\$8.91
April	\$14.85
May	\$8.91
June	\$18.81
July	\$22.77
August	\$17.82
September	\$21.78
October	\$19.80
November	\$26.85
December	\$22.77

Table 3a: Quantitative Monthly Sales

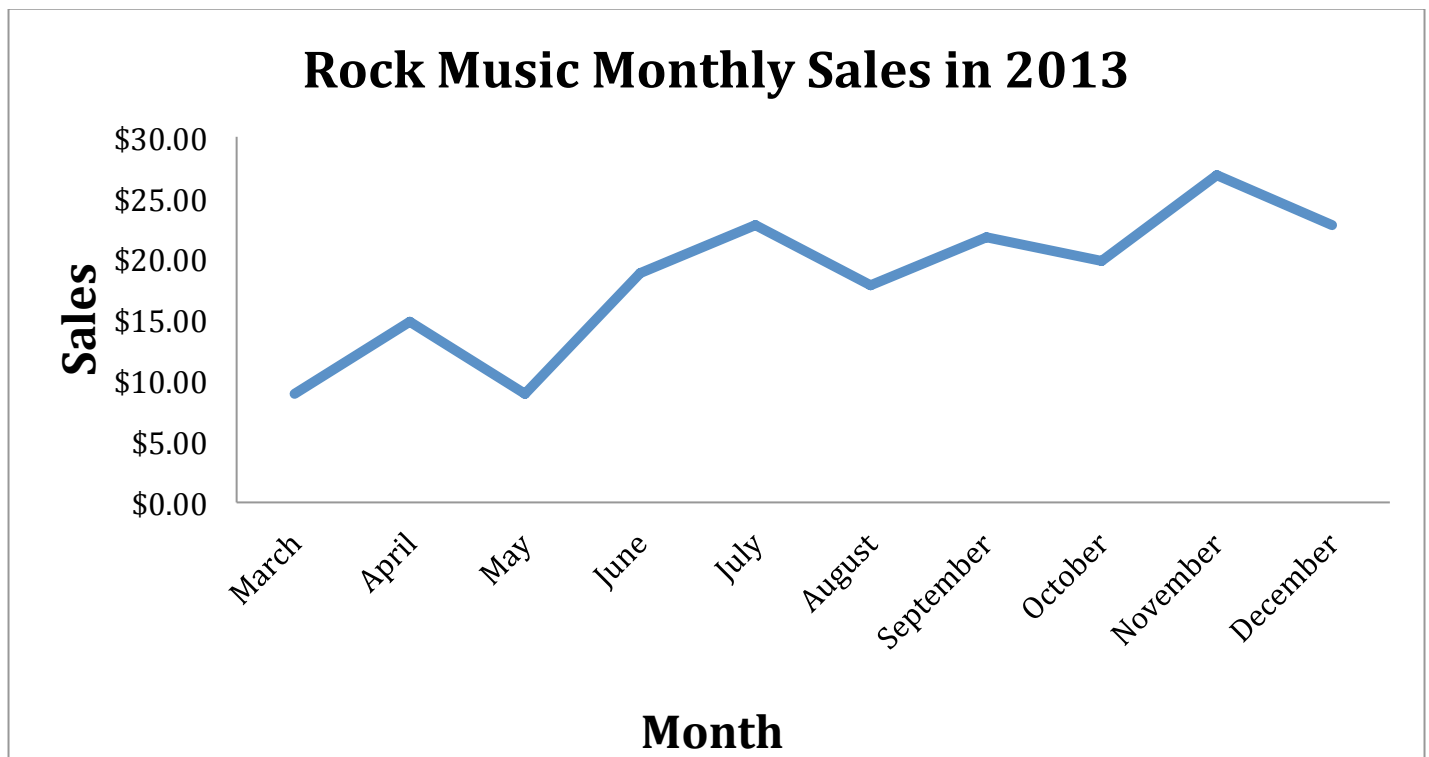


Figure 3.1: Monthly Sales of Rock Music in 2013

Conclusion: As we can see from Figure 3.1, Rock music steadily increased throughout the months of March until the end of the year in 2013. By the month of December there has been a 2.5 time increase in sales since the month of March in 2013. Query results did not show any data from January to February for the year 2013.

Question 4:

What is the average length of Led Zeppelin's music? (SQL 5)

How do they compare with the rest of his music? (SQL 6)

Average	351942.2281
Shortest Length	126641
Longest Length	1612329
# of Songs Above Average	39
Standard Deviation	206585.833
Median	289031

Table 4a: Comparison Values

Conclusion: The average length of Led Zeppelin's music is about **351,942 milliseconds**. There are **114 tracks** under Led Zeppelin's name. Out of them all **39 tracks** have lengths that are above the average length of all his music. We also see than half of the music lengths are longer than 289,031 milliseconds and half of the music lengths are shorter than that. Led Zeppelin's shortest and longest song lengths are **126,641** and **1,612,329** milliseconds respectively. His longest song has a length that is about 4.5 times the average.

Another insight to note is that the average is larger than the mean. We can assume that the curve distribution with be skewed to the right, which is proven in Figure 4.1 below:

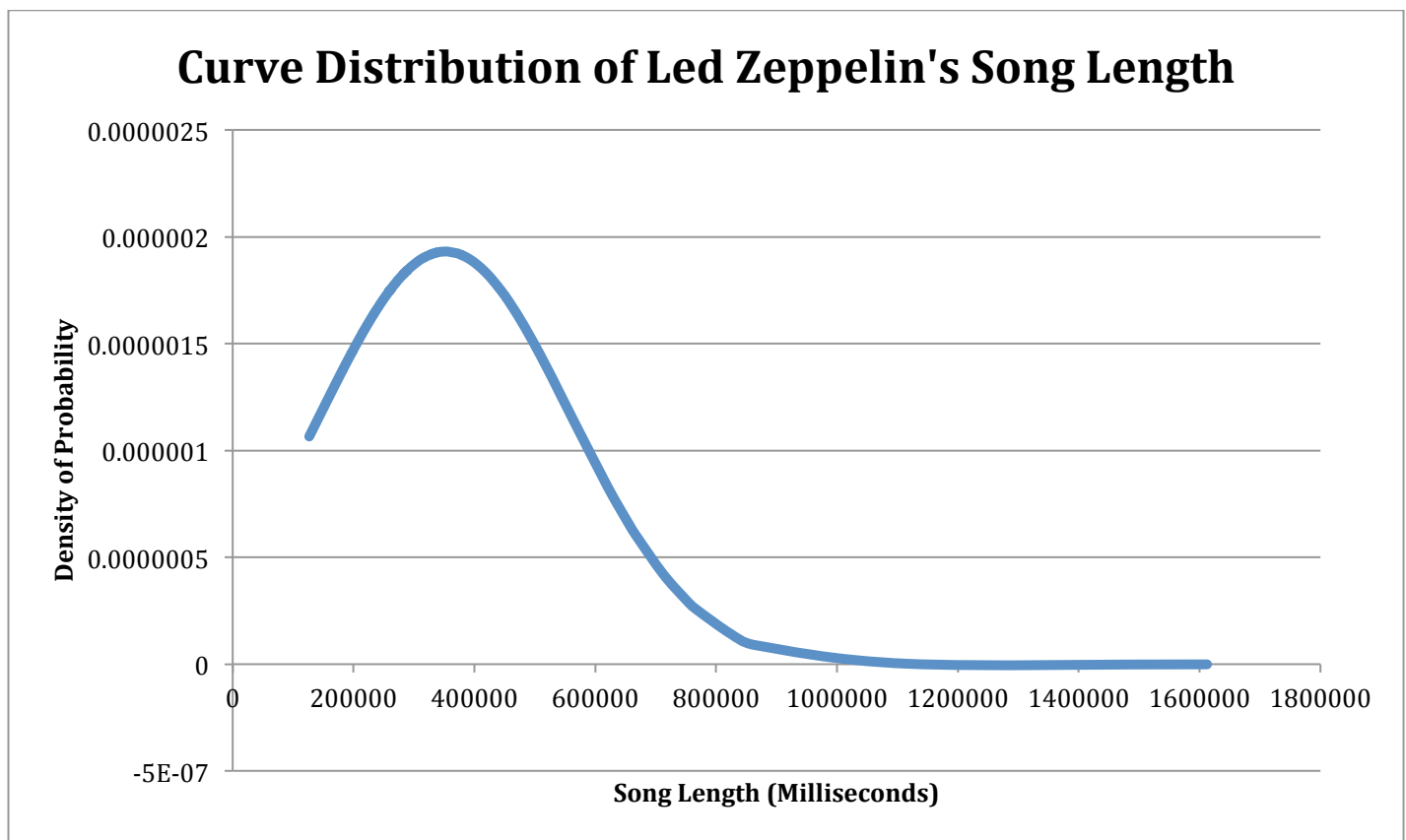


Figure 4.1: Curve Distribution of Led Zeppelin's Song Length

From Figure 4.1, we see that the curve somewhat resembles a normal distribution. This could be due to large outliers stretching the data. This is supported by the fact that we have a large standard deviation of 206,585 because the larger the standard deviation, the wider the spread of the data points.