

Result Analysis

1. Rank top 3 Breweries which produce the strongest beers?

Ans: Figure 2. Shows the top three breweries according to customer review ratings. Top three breweries ID are 29423,66415,1734 based on the mean of all the customer review.

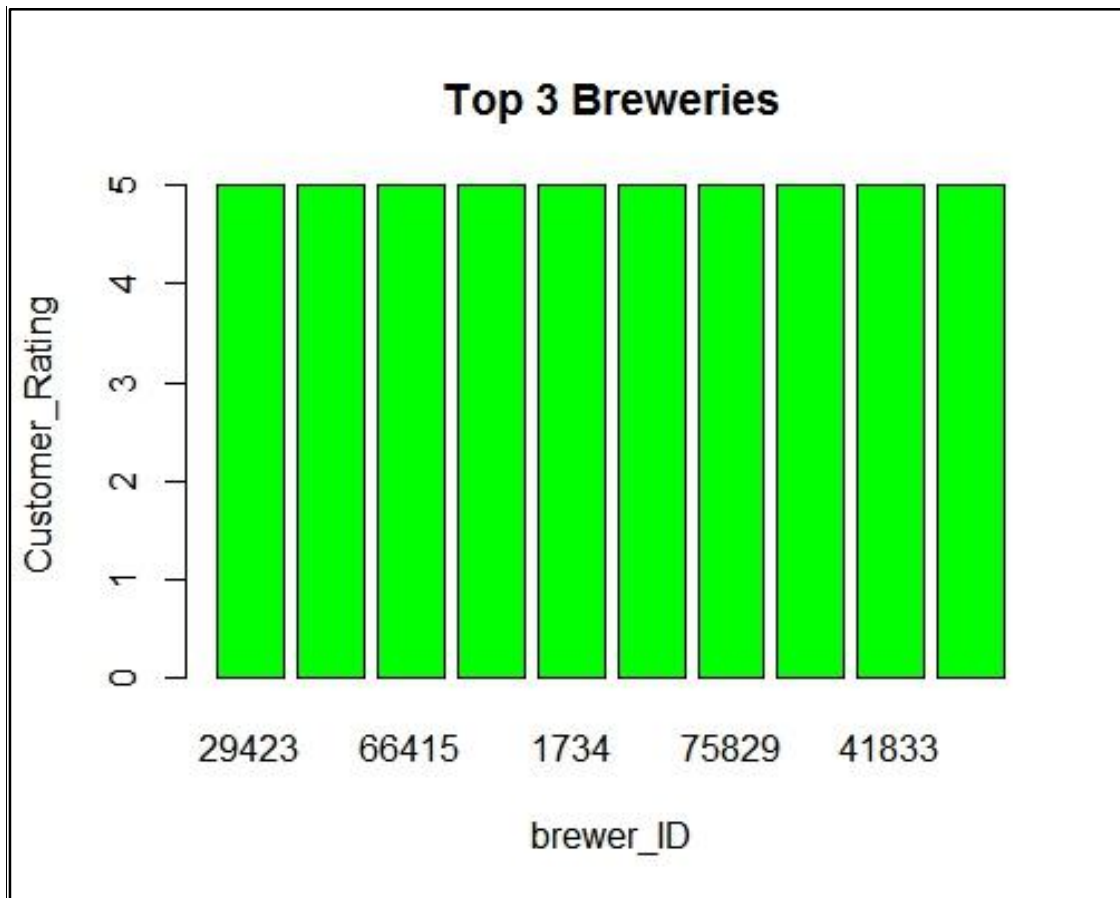


Figure 1: Top 3 Breweries

2. Which year did beers enjoy the highest ratings?

Ans: According to figure 3 the highest ratings is on year 2000.

To find out the highest ratings considered the parameter such as Review_Time, Mean of Beer_Review

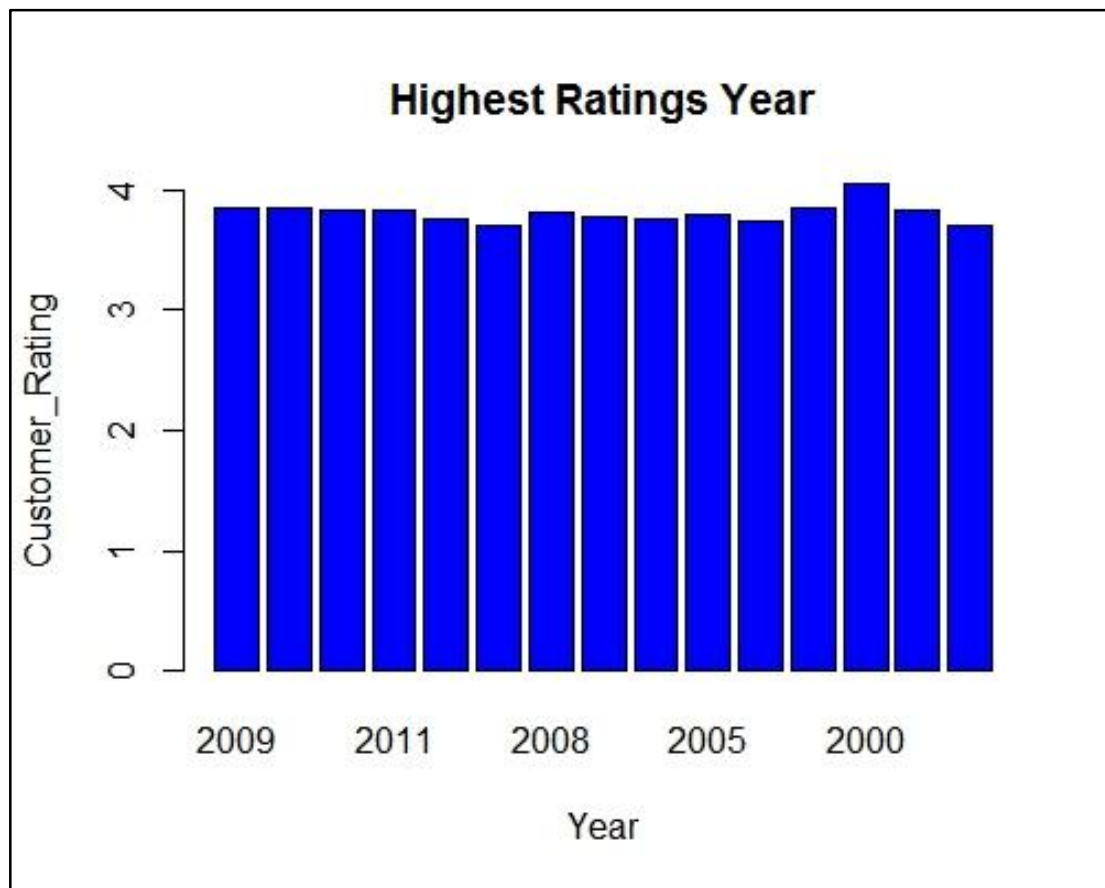


Figure 2: Highest_Rating

3. Based on the user's ratings which factors are important among taste, aroma, appearance, and palette?

Ans: From Figure 4 it clears that Appearance is the important factor as per user's rating, For this analysis consider a customer review average for factors like taste, aroma, appearance, and palette. For taste, aroma, appearance and palette got user rating 3.76, 3.81, 3.86 and 3.75 respectively. From this analysis we can say that appearance is the important factor.

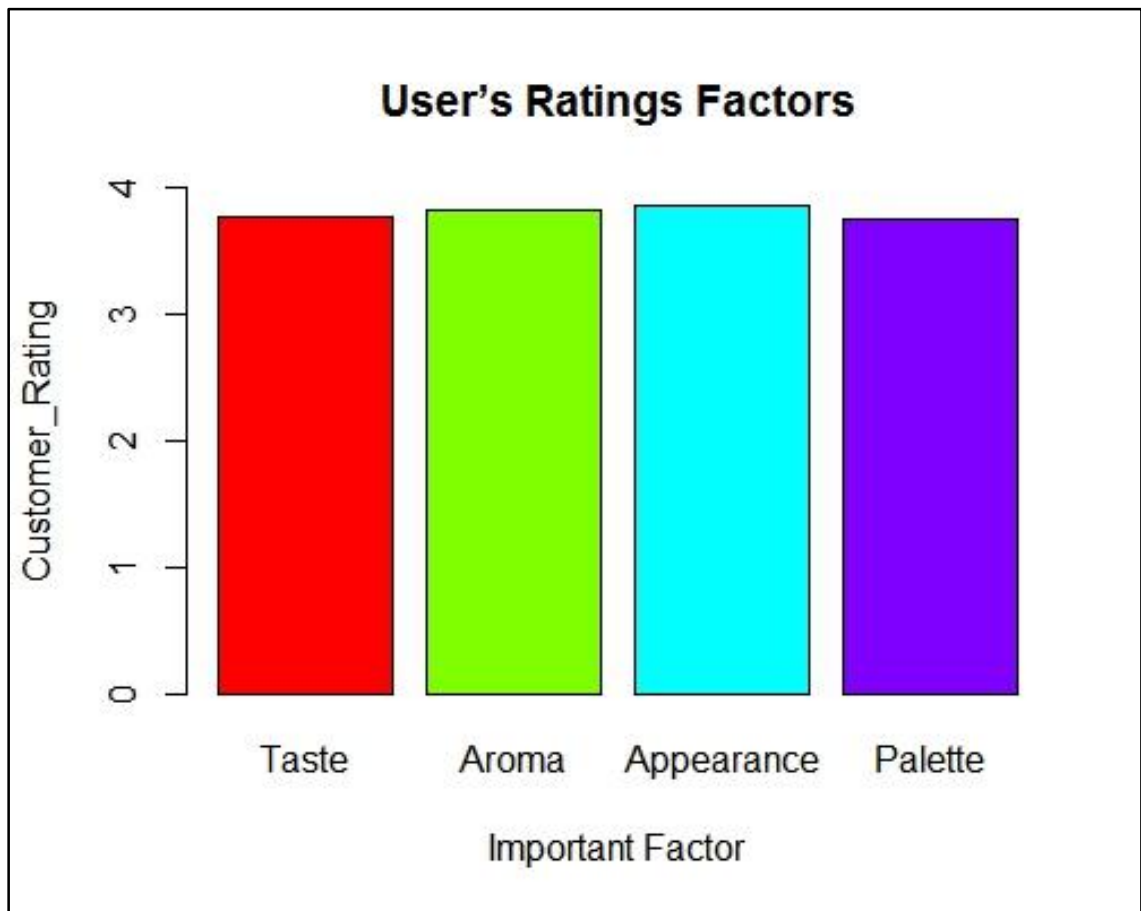


Figure 3: User Rating Factor

4. If you were to recommend 3 beers to your friends based on this data which ones will you recommend?

Ans: From figure 5 I will recommend “*Sierra Nevada Summerfest Lager, Sierra Nevada Celebration Ale, Blithering Idiot*” to my friends.

For Recommendation of beers used sentiment analysis of review text where we come to know this three beers having most positive review from customer.

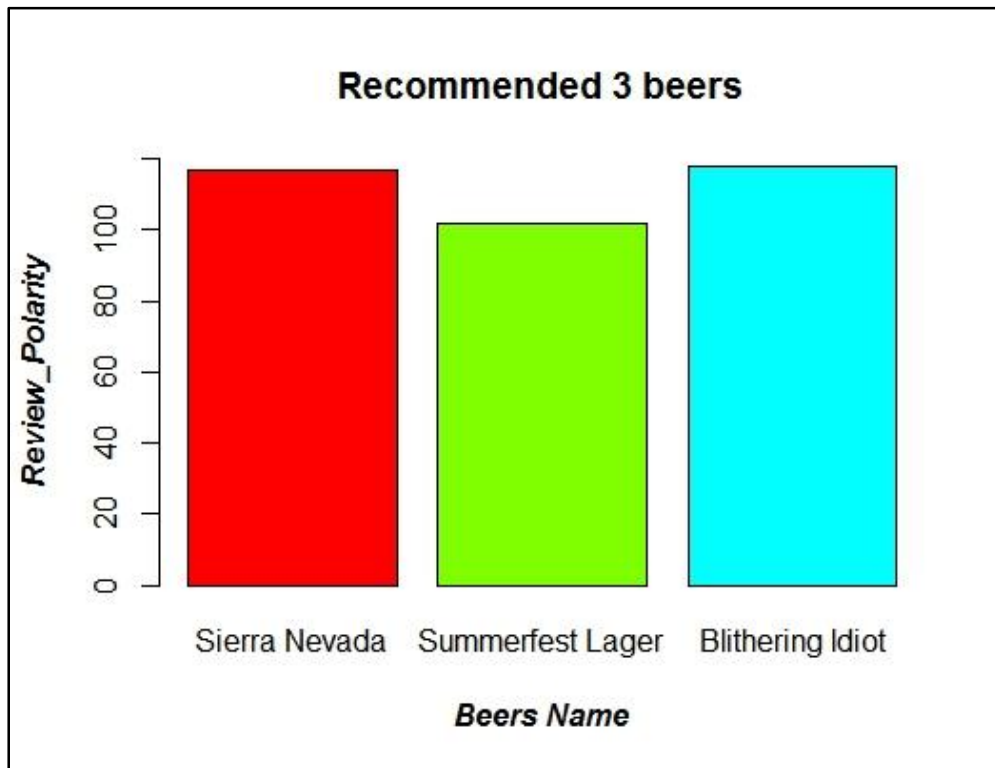


Figure 4: Recommended Beers

5. Which Beer style seems to be the favorite based on reviews written by users?

Ans: From Figure 6 *English Barleywine* beer style to be favorite based on customer review_text. For the analysis sentiment analysis is performed and considered the most positive review_text.

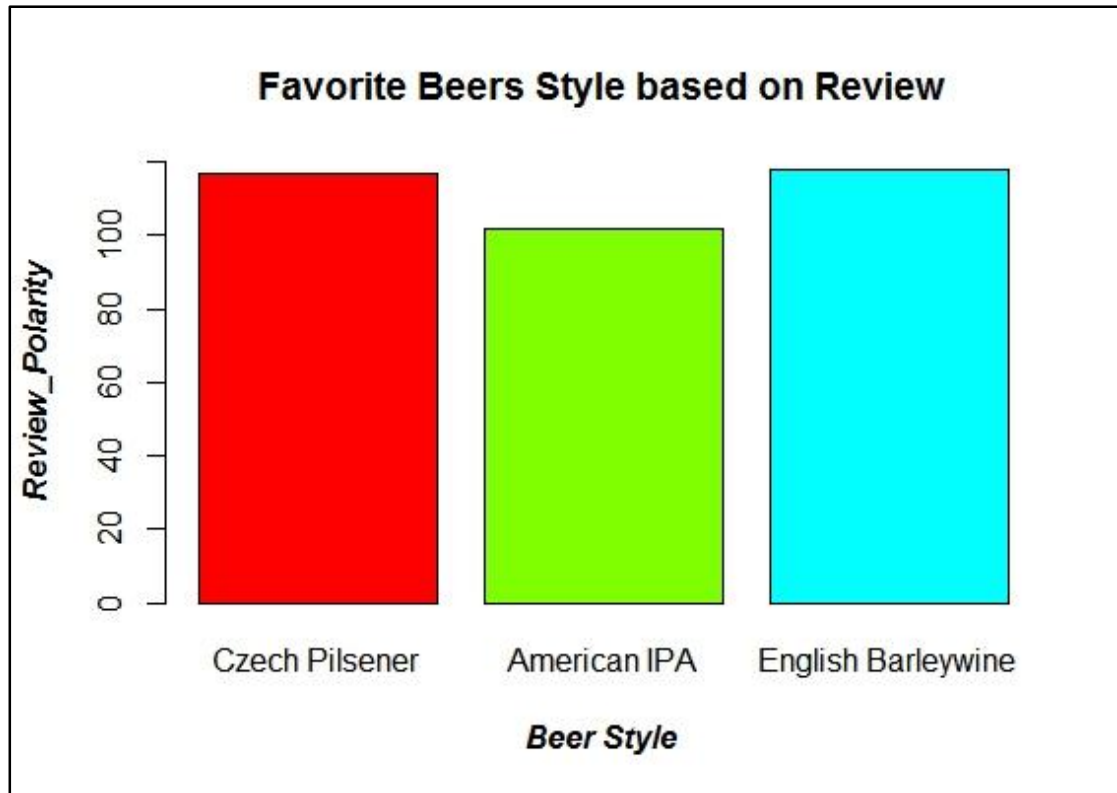


Figure 5: Favorite Beers Style

6. How does written review compare to overall review score for the beer styles?

Ans: From figure 7, while compare to written review score to overall review score it observed that when review overall having more rating then the sentiment score of review text is less and it also observed that when review overall rating is less then sentiment score is high. We can say that instead of review overall ratings, review text gives better results.

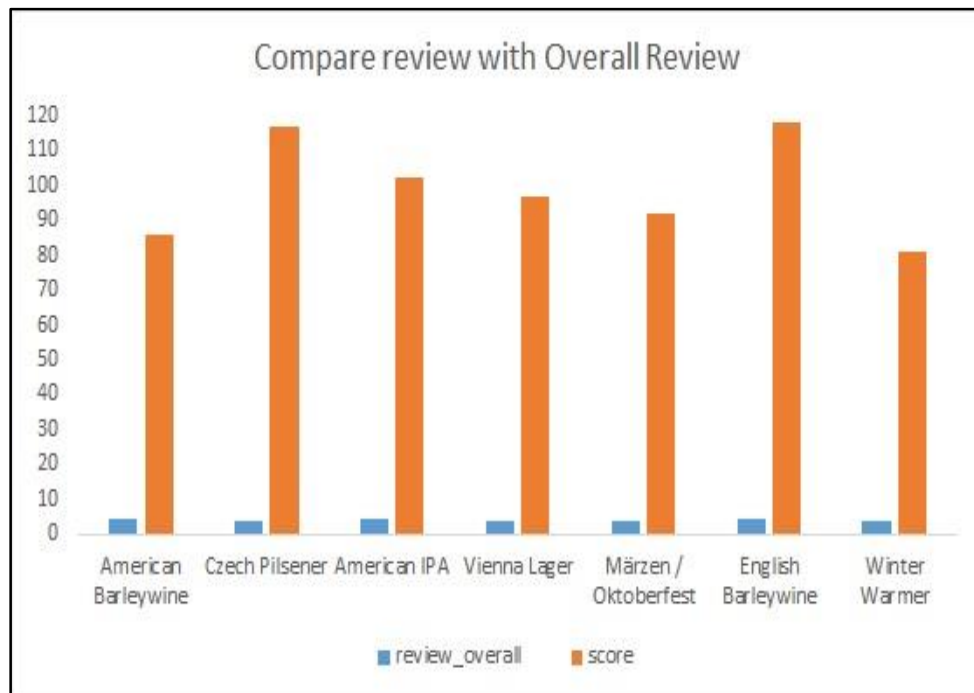


Figure 6: Comparison between Written and Overall Review

7. How do find similar beer drinkers by using written reviews only?

Ans: Need more time to solve the question.