Max. Marks 100.00

1 Questions Total Marks: 100.0

1 Machine Learning Question

ZS-ML-99

1. Predict the News Sentiment

Question 1

+ 100.0

Predict the News Sentiment

## **Problem Statement**

Social Media has been taking up everything on the Internet. People getting the latest news, useful resources, life partner and what not. In a world where Social media plays a big role in giving news, we must also know that news which affects our sentiments are going to get spread like a wildfire. Here is a dataset which has news items based on four topics, economy, Obama, Microsoft, and Palestine. Based on the Headline and the title, and according to the date given and the Social media platforms, you have to predict how it has affected the human sentiment scores. You have to predict the column "SentimentTitle" and "SentimentHeadline".

## **Column Description**

SI. No.	Column Label	Column Description
1	IDLink	Unique ID Link for each news
2	Title	Title of the News
3	Headline	The headline of the News
4	Source	News Source
5	Topic	The topic of the News
6	PublishDate	Date and Time when the news was published
7	Facebook	The final value of the news items' popularity according to the social media source Facebook
8	Google+	The final value of the news items' popularity according to the social media source Google+
9	LinkedIn	The final value of the news items' popularity according to the social media source LinkedIn
10	SentimentTitle	Sentiment score of the title, Higher the score, better is the impact or +ve sentiment and vice-versa. (Target Variable 1)
11	SentimentHeadline	Sentiment score of the text in the news items' headline. Higher the score, better is the impact or +ve sentiment. (Target Variable 2)

In some cases, you'll see –ve sentiment for the title but +ve sentiment in the headline, that's because after reading the title some people got upset, but after they read the complete headline, they felt better. Social media popularity, -ve or low-value means, the news was not so engaging and interesting and didn't reach out to many people in that particular platform. Higher the value better is the outreach.

## **Submission Format**

You have to predict the column "SentimentTitle" and "SentimentHeadline" and please submit in the format given in the "sample\_submissions.csv" file.

IDLink,SentimentTitle,SentimentHeadline tFrqIR6Chj,0.068518519,-0.039304967 DVAaGErjlF,0,-0.013312701 OT9UIZm5M2,0.036084392,0.037820653 lflGp3q2Fj,-0.073610645,-0.417361111 zDYG0SoovZ,0.047111148,-0.213200716



## **Evaluation Metrics**

Scores are evaluated based on the weighted sum of the mean\_absolute\_error metric on both the predicted values.

Leaderboard score =  $max(0, (1 - (0.4 \cdot (MAE_{title}) + 0.6 \cdot (MAE_{headline})))$ 

