## MINI PROJECT

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Course - BTech

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Topic – Twitter Sentiments and System Analysis

Branch – Computer Engineering

## Introduction

What do you do when you want to express yourself or reach out to a large audience? We log on to one of our favorite social media services. Social Media has taken over in today's world, most of the methods we use to connect and communicate are using social networks, and Twitter is one of the major places where we express our sentiments about a specific topic or a concept. Twitter serves as a mean for individuals to express their thoughts or feelings about different subjects. [1] These emotions are used in various analytics for better understanding of humans. [2] In this paper, we have attempted to conduct sentiment analysis on "tweets" using different machine learning algorithms. We attempt to classify the polarity of the tweet where it is either positive or negative. If the tweet has both positive and negative elements, the more dominant sentiment should be picked as the final label.

## **Methodology**

In this paper we classify sentiments with the help of machine learning and natural language processing (NLP) algorithms, we use the datasets from Kaggle which was crawled from the internet and labeled positive/negative. The data provided comes with emoticons (emoji), usernames and hashtags which are required to be processed (so as to be readable) and converted into a standard form. We also need to extract useful features from the text such unigrams and bigrams which is a form of representation of the "tweet". We use various machine learning algorithms based on NLP (Natural Language Processing) to conduct sentiment analysis using the extracted features. Finally, we report our experimental results and findings at the end.

I have written my code on colaboratory online coding platform.

The language used for it is python.

The sentiments analysed are such as positive, negative and neutral and displayed in percentage.

I have successfully run my code and completed the project.