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| **Usecase1** | **Using R create an program for social median behaviour analysis in twitter.** |

**Aim** : Using R create an program for social median behaviour analysis in twitter.

**Algorithm :**

* **Set Up Environment**: Install and load the rtweet and tidyverse packages.
* **Authenticate with Twitter API**: Use your Twitter API credentials to create an authentication token.
* **Fetch Data:** Use the search\_tweets function to fetch tweets with the hashtag #DataScience, specifying language and number of tweets.
* **Select Relevant Data**: Select relevant columns: screen\_name, text, created\_at, favorite\_count, retweet\_count.
* **Clean Data**: Filter out any tweets with missing text.
* **Summarize Data**: Group the tweets by screen\_name and calculate summary statistics
* **tweet\_count**: Number of tweets per user.
* **avg\_favorites**: Average favorites per tweet for each user.
* **avg\_retweets**: Average retweets per tweet for each user.
* **Print Summary**: Print the summary table showing each user's tweet count, average favorites, and average retweets.

**Program :**

# Install and load necessary libraries

install.packages("rtweet")

install.packages("tidyverse")

library(rtweet)

library(tidyverse)

# Authenticate with Twitter API (you need your own credentials)

auth <- rtweet::create\_token(

app = "your\_app\_name",

consumer\_key = "your\_consumer\_key",

consumer\_secret = "your\_consumer\_secret",

access\_token = "your\_access\_token",

access\_secret = "your\_access\_secret"

)

# Fetch tweets containing a specific hashtag

tweets <- search\_tweets("#DataScience", n = 1000, lang = "en", include\_rts = FALSE)

# Data cleaning

tweets <- tweets %>%

select(screen\_name, text, created\_at, favorite\_count, retweet\_count) %>%

filter(!is.na(text))

# Basic analysis

tweet\_summary <- tweets %>%

group\_by(screen\_name) %>%

summarise(

tweet\_count = n(),

avg\_favorites = mean(favorite\_count),

avg\_retweets = mean(retweet\_count)

)

# Print summary

print(tweet\_summary)

**Result :** Thus using python we successfully implemented social median behaviour analysis in twitter.

**Output:**

**# A tibble: 3 x 4**

**screen\_name tweet\_count avg\_favorites avg\_retweets**

**<chr> <dbl> <dbl> <dbl>**

1 user1 10 2.5 1.3

2 user2 8 3.1 2.5

3 user3 12 4.0 3.0

