

TWITTER

DATA MANAGEMENT

OF

USERS IN A

REGION

ABSTRACT:

In social media, information is present in large amount. Extracting information from social media gives us several usage in various fields. In the field of biomedical and healthcare, extracting information from social media is providing number of benefits such as knowledge about the latest technology, updates of current situation in medical field etc.

Twitter is one of the social media which allows the user post tweets of limited number of characters and share the tweet to their followers. Twitter allows application developer to access the tweets for their purpose. Based on the analysis of comments and reply's people can jump into a conclusion and find a solution to a problem based on user's feedback.

REQUIREMENTS ANALYSIS:

LIST OF TABLES:

>USERS

>POSTS

>TWEET

>HAS

>FOLLOWING

>HAS_A

>RESPONSE

List of attributes with their domain types:

USERS:

USER_NAME : VARCHAR2(10)

USER_ID :VARCHAR2(10)

MOB_NO : NUMBER(10)

VERIFIED_FLAG : CHAR(1)

EMAIL_ID : VARCHAR2(25)

PASSWORD : VARCHAR2(5)

TWEET:

MESSAGE : VARCHAR2(60)

POLARITY :CHAR(1)

LIKES : NUMBER(4)

TWEET_ID :VARCHAR2(10)

CATEGORY : VARCHAR2(10)

POSTS:

USER_ID :VARCHAR2(10)

TWEET_ID :VARCHAR2(10)

P_DATE : DATE

FOLLOWING:

F_USER_ID : VARCHAR2(10)

Has:

USER_ID : VARCHAR2(10)

F_USER_ID :VARCHAR2(10)

SINCE : DATE

RESPONSE:

R_USER_ID :VARCHAR2(10)

REPLIED_DATE :DATE

CATEGORY : VARCHAR2(6)

MESSAGE :VARCHAR2(100)

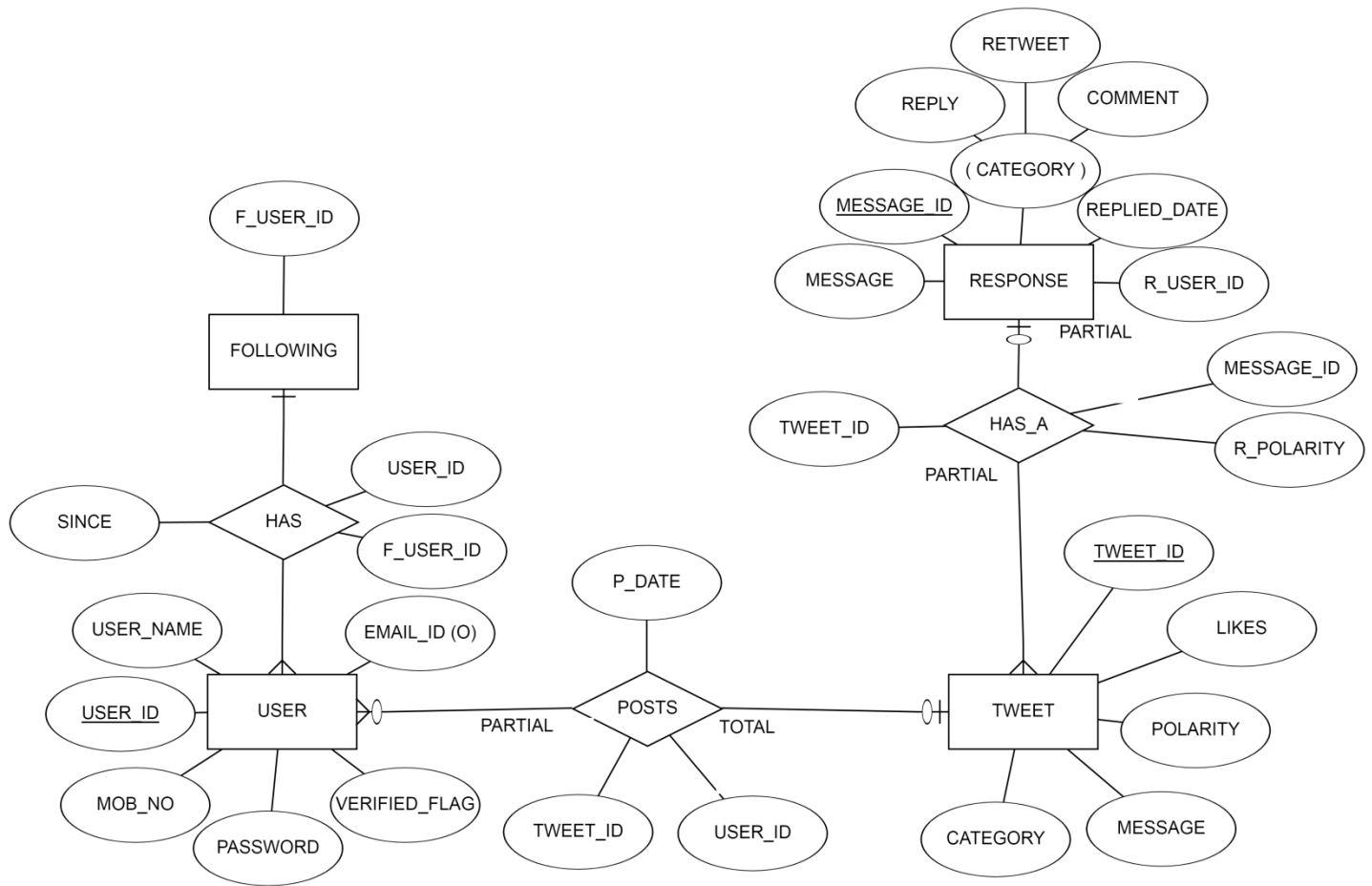
MESSAGE_ID :VARCHAR2(10)

HAS_A:

TWEET_ID :VARCHAR2(10)

MESSAGE_ID :VARCHAR2(10)

R_POLARITY :CHAR(1)

ER DIAGRAM:**Mapping Cardinalities and Participation Constraints:**

- >One user can post many posts, so one to many cardinality suit posts.
- > One user can have many followers, so one to many cardinality suit has.
- >A tweet can have many responses, so one to many cardinality suit has_a.

DDL AND DML COMMANDS:

SQL> create table Users(

2 user_name varchar2(10),

3 user_id number(5) primary key,

4 mob_no number(10,0),

5 verified_flag char(1) check (verified_flag in ('Y','N')),

6 email_id varchar2(10),

7 password varchar2(5));

Table created.

SQL> alter table Users modify(user_id varchar2(10));

Table altered.

SQL> desc users;

Name	Null?	Type
-----	-----	-----
USER_NAME		VARCHAR2(10)
USER_ID	NOT NULL	VARCHAR2(10)
MOB_NO		NUMBER(10)
VERIFIED_FLAG		CHAR(1)
EMAIL_ID		VARCHAR2(10)
PASSWORD		VARCHAR2(5)

```
SQL> alter table users modify(email_id varchar2(25));
```

Table altered.

```
SQL> desc users
```

Name	Null?	Type
-----	-----	-----
USER_NAME		VARCHAR2(10)
USER_ID	NOT NULL	VARCHAR2(10)
MOB_NO		NUMBER(10)
VERIFIED_FLAG		CHAR(1)
EMAIL_ID		VARCHAR2(25)
PASSWORD		VARCHAR2(5)

```
SQL> insert into users
```

```
values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password  

```

Enter value for user_name: Badrinath

Enter value for user_id: Badri2428

Enter value for mob_no: 9381756470

Enter value for verified_flag: Y

Enter value for email_id: badrinath@gmail.com

Enter value for password: Badri2428

old 1: insert into users

```
values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password')
```

new 1: insert into users

```
values('Badrinath','Badri2428',9381756470,'Y','badrinath@gmail.com','Badri2428')
```

1 row created.

SQL> /

Enter value for user_name: Abhiraj

Enter value for user_id: Abhi5007

Enter value for mob_no: 9949939007

Enter value for verified_flag: Y

Enter value for email_id: dusariabhiraj@gmail.com

Enter value for password: abcd1234@

old 1: insert into users

```
values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password')
```

new 1: insert into users

```
values('Abhiraj','Abhi5007',9949939007,'Y','dusariabhiraj@gmail.com','abcd1234@')
```

1 row created.

SQL> alter table users modify(user_name varchar2(10) not null);

Table altered.

```
SQL> alter table users modify(mob_no number(10) not null);
```

Table altered.

```
SQL> desc users;
```

Name	Null?	Type
-----	-----	-----
USER_NAME	NOT NULL	VARCHAR2(10)
USER_ID	NOT NULL	VARCHAR2(10)
MOB_NO	NOT NULL	NUMBER(10)
VERIFIED_FLAG		CHAR(1)
EMAIL_ID		VARCHAR2(25)
PASSWORD		VARCHAR2(10)

```
SQL> insert into users
```

```
values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password');
```

Enter value for user_name: Yash

Enter value for user_id: Yash6960

Enter value for mob_no: 8686819973

Enter value for verified_flag: N

Enter value for email_id: yasho6960@gmail.com

Enter value for password: 6960118

old 1: insert into users

values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password')

new 1: insert into users

values('Yash','Yash6960','8686819973','N','yasho6960@gmail.com','6960118')

1 row created.

SQL> /

Enter value for user_name: pranav

Enter value for user_id: Prana0680

Enter value for mob_no: 9515789639

Enter value for verified_flag: N

Enter value for email_id: pranav23@gmail.com

Enter value for password: pranav23

old 1: insert into users

values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password')

new 1: insert into users

values('pranav','Prana0680','9515789639','N','pranav23@gmail.com','pranav23')

1 row created.

SQL> /

Enter value for user_name: Varun

Enter value for user_id: bel007

Enter value for mob_no: 8179700761

Enter value for verified_flag: Y

Enter value for email_id:

Enter value for password: varun115

old 1: insert into users

values('&user_name','&user_id','&mob_no','&verified_flag','&email_id','&password')

new 1: insert into users values('Varun','bel007','8179700761','Y','','varun115')

1 row created.

SQL> select * from users;

USER_NAME	USER_ID	MOB_NO	V	EMAIL_ID	PASSWORD
-----	-----	-----	-	-----	-----
Badrinath	Badri2428	9381756470	Y	badrinath@gmail.com	Badri2428
Abhiraj	Abhi5007	9949939007	Y	dusariabhiraj@gmail.com	abcd1234@
Yash	Yash6960	8686819973	N	yasho6960@gmail.com	6960118
pranav	Prana0680	9515789639	N	pranav23@gmail.com	pranav23

SQL> create table tweet

```
2 (  
3 message varchar2(60),  
4 polarity char(1) check (polarity in ('P','N')),  
5 likes number(4,0),  
6 tweet_id varchar2(10),  
7 twote_date date,  
8 category varchar2(10));
```

Table created.

SQL> alter table tweet add(primary key(tweet_id));

Table altered.

SQL> alter table tweet drop(twote_date);

Table altered.

SQL> desc tweet;

Name	Null?	Type
-----	-----	-----
MESSAGE		VARCHAR2(60)
POLARITY		CHAR(1)
LIKES		NUMBER(4)
TWEET_ID	NOT NULL	VARCHAR2(10)
CATEGORY		VARCHAR2(10)

SQL> insert into tweet

values('&message','&polarity',&likes,'&tweet_id','&category');

Enter value for message: A new dawn,fresh vigour and renewed hope in Assam!.

Enter value for polarity: P

Enter value for likes: 4024

Enter value for tweet_id: TY1456278

Enter value for category: Social

old 1: insert into tweet

values('&message','&polarity',&likes,'&tweet_id','&category')

new 1: insert into tweet values('A new dawn,fresh vigour and renewed hope in Assam!.','P',4024,'TY1456278','Social')

1 row created.

SQL> /

Enter value for message: Strolling in sidney.

Enter value for polarity: P

Enter value for likes: 1234

Enter value for tweet_id: Tx129674

Enter value for category: Fun

old 1: insert into tweet

values('&message','&polarity',&likes,'&tweet_id','&category')

new 1: insert into tweet values('Strolling in sidney.','P',1234,'Tx129674','Fun')

1 row created.

SQL> insert into tweet

values('&message','&polarity',&likes,'&tweet_id','&category');

Enter value for message: Sending my best wishes to the Indian U19 Cricket team ahead of their world cup final.

Enter value for polarity: P

Enter value for likes: 9876

Enter value for tweet_id: QW189528

Enter value for category: Sports

old 1: insert into tweet

values('&message','&polarity',&likes,'&tweet_id','&category')

new 1: insert into tweet values('Sending my best wishes to the Indian U19 Cricket team ahead of their world cup

final.','P',9876,'QW189528','Sports')

1 row created.

SQL> /

Enter value for message: Stronger together.Happy Republic Day to all of us.

Enter value for polarity: P

Enter value for likes: 9123

Enter value for tweet_id: QP196328

Enter value for category: Social

old 1: insert into tweet

values('&message','&polarity',&likes,'&tweet_id','&category')

new 1: insert into tweet values('Stronger together.Happy Republic Day to all of us.','P',9123,'QP196328','Social')

1 row created.

SQL> /

Enter value for message: In such a massive country like India,only 2200 people have declared their annual income over 1cr.

Enter value for polarity: N

Enter value for likes: 1450

Enter value for tweet_id: AS190634

Enter value for category: Social

old 1: insert into tweet

values('&message','&polarity','&likes','&tweet_id','&category')

new 1: insert into tweet values('In such a massive country like India,only 2200 people have declared their annual income

over 1cr.','N',1450,'AS190634','Social')

SQL> /

Enter value for message: The ganga is at the heart of our civilisation.I am glad you spent time in varanasi @Yasho.

Enter value for polarity: P

Enter value for likes: 7803

Enter value for tweet_id: ZX678310

Enter value for category: Fun

old 1: insert into tweet

values('&message','&polarity','&likes','&tweet_id','&category')

new 1: insert into tweet values('The ganga is at the heart of our civilisation.I am glad you spent time in varanasi

@Yasho.','P',7803,'ZX678310','Fun')

1 row created.

SQL> select message,tweet_id from tweet;

MESSAGE	TWEET_ID
A new dawn,fresh vigour and renewed hope in Assam!.	TY1456278
Strolling in sidney.	Tx129674
Sending my best wishes to the Indian U19 Cricket team ahead of their world cup final.	QW189528
Stronger together.Happy Republic Day to all of us.	QP196328

In such a massive country like India,only 2200 people

AS190634

have declared their annual income over 1cr

The ganga is at the heart of our civilisation.I am

ZX678310

glad you spent time in varanasi @Yasho6960.

6 rows selected.

SQL> select tweet_id,polarity,likes,category from tweet;

TWEET_ID	P	LIKES	CATEGORY
-----	-	-----	-----
TY1456278	P	4024	Social
Tx129674	P	1234	Fun
QW189528	P	9876	Sports
QP196328	P	9123	Social
AS190634	N	1450	Social
ZX678310	P	7803	Fun

6 rows selected.

SQL> create table posts(

```
2 user_id varchar2(10) references users(user_id),  
3 tweet_id varchar2(10) references tweet(tweet_id),  
4 p_date date);
```

Table created.

```
SQL> insert into posts values('&user_id','&tweet_id', '&p_date');
```

Enter value for user_id: Badri2428

Enter value for tweet_id: TY1456278

Enter value for p_date: 22-JAN-2018

```
old 1: insert into posts values('&user_id','&tweet_id', '&p_date')
```

```
new 1: insert into posts values('Badri2428','TY1456278', '22-JAN-2018')
```

1 row created.

```
SQL> /
```

Enter value for user_id: Badri2428

Enter value for tweet_id: ZX678310

Enter value for p_date: 09-AUG-2010

```
old 1: insert into posts values('&user_id','&tweet_id', '&p_date')
```

new 1: insert into posts values('Badri2428','ZX678310', '09-AUG-2010')

1 row created.

SQL> /

Enter value for user_id: Yash6960

Enter value for tweet_id: Tx129674

Enter value for p_date: 24-DEC-2017

old 1: insert into posts values('&user_id','&tweet_id', '&p_date')

new 1: insert into posts values('Yash6960','Tx129674', '24-DEC-2017')

1 row created.

SQL> /

Enter value for user_id: Abhi5007

Enter value for tweet_id: QW189528

Enter value for p_date: 14-FEB-2018

old 1: insert into posts values('&user_id','&tweet_id', '&p_date')

new 1: insert into posts values('Abhi5007','QW189528', '14-FEB-2018')

1 row created.

SQL> /

Enter value for user_id: Prana0680

Enter value for tweet_id: QP196328

Enter value for p_date: 26-JAN-2020

old 1: insert into posts values('&user_id','&tweet_id', '&p_date')

new 1: insert into posts values('Prana0680','QP196328', '26-JAN-2020')

1 row created.

SQL> /

Enter value for user_id: bel007

Enter value for tweet_id: AS190634

Enter value for p_date: 22-JAN-2019

old 1: insert into posts values('&user_id','&tweet_id', '&p_date')

new 1: insert into posts values('bel007','AS190634', '22-JAN-2019')

1 row created.

SQL> alter table posts add(primary key(user_id,tweet_id));

Table altered.

SQL> desc posts;

Name	Null?	Type

USER_ID	NOT NULL	VARCHAR2(10)
TWEET_ID	NOT NULL	VARCHAR2(10)
P_DATE		DATE

SQL> select * from posts;

USER_ID	TWEET_ID	P_DATE
-----	-----	-----
Badri2428	TY1456278	22-JAN-18
Badri2428	ZX678310	09-AUG-10
Yash6960	Tx129674	24-DEC-17
Abhi5007	QW189528	14-FEB-18
Prana0680	QP196328	26-JAN-20
bel007	AS190634	22-JAN-19

6 rows selected.

SQL> create table following(

2 f_user_id references users(user_id));

Table created.

SQL> desc following;

Name	Null?	Type

F_USER_ID		VARCHAR2(10)

SQL> insert into following values('&f_user_id');

Enter value for f_user_id: Badri2428

old 1: insert into following values('&f_user_id')

new 1: insert into following values('Badri2428')

1 row created.

SQL> /

Enter value for f_user_id: Abhi5007

old 1: insert into following values('&f_user_id')

new 1: insert into following values('Abhi5007')

1 row created.

SQL> /

Enter value for f_user_id: Yash6960

old 1: insert into following values('&f_user_id')

new 1: insert into following values('Yash6960')

1 row created.

SQL> /

Enter value for f_user_id: Prana0680

old 1: insert into following values('&f_user_id')

new 1: insert into following values('Prana0680')

1 row created.

SQL> /

Enter value for f_user_id: bel007

old 1: insert into following values('&f_user_id')

new 1: insert into following values('bel007')

1 row created.

```
SQL> create table has(  
2 user_id varchar2(10),  
3 f_user_id varchar2(10),  
4 since date);
```

Table created.

```
SQL> alter table has add(foreign key(user_id) references users);
```

Table altered.

```
SQL> desc has;
```

Name	Null?	Type

USER_ID		VARCHAR2(10)

SINCE _____ DATE _____

SQL> /

Enter value for user_id: Abhi5007

Enter value for f_user_id: Badri2428

Enter value for since: 11-JAN-2001

old 1: insert into has values('&user_id','&f_user_id','&since')

new 1: insert into has values('Abhi5007','Badri2428','11-JAN-2001')

1 row created.

SQL> /

Enter value for user_id: Abhi5007

Enter value for f_user_id: Prana0680

Enter value for since: 12-NOV-2017

old 1: insert into has values('&user_id','&f_user_id','&since')

new 1: insert into has values('Abhi5007','Prana0680','12-NOV-2017')

1 row created.

SQL> /

Enter value for user_id: Yash6960

Enter value for f_user_id: Badri2428

Enter value for since: 17-FEB-2014

old 1: insert into has values('&user_id','&f_user_id','&since')

new 1: insert into has values('Yash6960','Badri2428','17-FEB-2014')

1 row created.

SQL> /

Enter value for user_id: Prana0680

Enter value for f_user_id: Abhi5007

Enter value for since: 12-SEP-2019

old 1: insert into has values('&user_id','&f_user_id','&since')

new 1: insert into has values('Prana0680','Abhi5007','12-SEP-2019')

1 row created.

SQL> select * from has;

USER_ID	F_USER_ID	SINCE
---------	-----------	-------

```
-----
Badri2428    bel007    12-JUL-19
Badri2428    Yash6960   27-DEC-16
Abhi5007     Badri2428  11-JAN-01
Abhi5007     Prana0680  12-NOV-17
Yash6960     Badri2428  17-FEB-14
Prana0680    Abhi5007   12-SEP-19
```

6 rows selected.

SQL> create table response

```
2 (
3 r_user_id varchar2(10) references users(user_id),
4 replied_date date,
5 category varchar2(6),
6 meassage varchar2(100),
7 message_id varchar2(10));
```

Table created.

SQL> alter table response rename column meassage to message;

Table altered.

```
SQL> alter table response add(primary key(message_id));
```

Table altered.

```
SQL> desc response;
```

Name	Null?	Type
-----		-----
R_USER_ID		VARCHAR2(10)
REPLIED_DATE		DATE
CATEGORY		VARCHAR2(6)
MESSAGE		VARCHAR2(100)
MESSAGE_ID	NOT NULL	VARCHAR2(10)

```
SQL> insert into response
```

```
values('&r_user_id','&replied_date','&category','&message','&message_id');
```

Enter value for r_user_id: Prana0680

Enter value for replied_date: 12-FEB-2020

Enter value for category: Reply

Enter value for message: Yeah its shocking.

Enter value for message_id: QW12345

old 1: insert into response

values('&r_user_id','&replied_date','&category','&message','&message_id')

new 1: insert into response values('Prana0680','12-FEB-2020','Reply','Yeah its shocking.','QW12345')

1 row created.

SQL> /

Enter value for r_user_id: Yash6960

Enter value for replied_date: 11-FEB-2020

Enter value for category: REPLY

Enter value for message: Yeah! It was awfull.

Enter value for message_id: QN18756

old 1: insert into response

values('&r_user_id','&replied_date','&category','&message','&message_id')

new 1: insert into response values('Yash6960','11-FEB-2020','REPLY','Yeah! It was awfull.','QN18756')

1 row created.

SQL> select r_user_id,replied_date,category,message_id from response;

R_USER_ID REPLIED_D CATEGO MESSAGE_ID

Prana0680 12-FEB-20 Reply QW12345

Yash6960 11-FEB-20 REPLY QN18756

SQL> select message,message_id from response;

MESSAGE	MESSAGE_ID
-----	-----
Yeah its shocking	QW12345
Yeah! It was awfull.	QN18756

SQL> create table has_a (
 2 tweet_id varchar2(10) references tweet(tweet_id),
 3 message_id varchar2(10) references response(message_id),
 4 r_polarity char(1));

Table created.

```
SQL> desc has_a
```

Name	Null?	Type

TWEET_ID		VARCHAR2(10)
MESSAGE_ID		VARCHAR2(10)
R_POLARITY		CHAR(1)

```
SQL> insert into has_a values('&tweet_id','&message_id','&r_polarity');
```

Enter value for tweet_id: AS190634

Enter value for message_id: QW12345

Enter value for r_polarity: P

```
old 1: insert into has_a values('&tweet_id','&message_id','&r_polarity')
```

```
new 1: insert into has_a values('AS190634','QW12345','P')
```

1 row created.

```
SQL> /
```

Enter value for tweet_id: ZX678310

Enter value for message_id: QN18756

Enter value for r_polarity: P

old 1: insert into has_a values('&tweet_id','&message_id','&r_polarity')

new 1: insert into has_a values('ZX678310','QN18756','P')

1 row created.

SQL> select * from has_a;

TWEET_ID	MESSAGE_ID	R
----------	------------	---

AS190634	QW12345	P
----------	---------	---

ZX678310	QN18756	P
----------	---------	---

TNAME	TABTYPE	CLUSTERID
-----	-----	-----
FOLLOWING	TABLE	
HAS	TABLE	
HAS_A	TABLE	
POSTS	TABLE	
RESPONSE	TABLE	
TWEET	TABLE	

USERS TABLE

7 rows selected.