

## RELATIONAL ALGEBRA

1. select UserName,Verified\_Account from mbta\_info where Verified\_Account="True";  
 $\pi$  UserName,Verified\_Account  $\sigma$  Verified\_Account=True(mbta)
2. select DISTINCT UserName,Userfollowerscount FROM mbta\_info;  
 $\pi$  UserName,Userfollowerscount (mbta)
3. select DISTINCT UserName,Userfollowerscount FROM mbta\_info WHERE UserName = "MBTA";  
 $\pi$  UserName,Userfollowerscount  $\sigma$  UserName = MBTA(mbta)
4. SELECT DISTINCT Location FROM mbta\_info;  
 $\pi$  Location (mbta)
5. SELECT DISTINCT UserName,Location FROM mbta\_info where UserName="MBTA";  
 $\pi$  UserName,Location  $\sigma$  UserName = MBTA(mbta)
6. select DISTINCT Source,UserName,Location from mbta\_info where UserName="MBTA Commuter Rail";  
 $\pi$  Source,UserName,Location  $\sigma$  UserName=MBTA Commuter Rail(mbta)
7. SELECT DISTINCT UserName,User\_Description from mbta\_info ;  
 $\pi$  UserName,User\_Description (mbta)
8. SELECT MAX(Userfavouritescount),UserName,Text , Source , Verified\_Account FROM mbta\_info;

Gmax (Userfavouritescount)  $\pi$  UserName,Text , Source , Verified\_Account(mbta)

9. SELECT min(Userfavouritescount),UserName,Text , Source , Verified\_Account FROM mbta\_info;

Gmin (Userfavouritescount)  $\pi$  UserName,Text , Source , Verified\_Account(mbta)

10. SELECT UserName,text as textfield from mbta\_info where text like '%North%';  
 $\pi$  UserName,text  $\sigma$  text =North (mbta)

11. SELECT COUNT(\*) my\_tweet\_count FROM mbta\_info LIMIT 1 ;  
Gcount (my\_tweet\_count) (mbta)

12. SELECT SUBSTR(created\_at, 0, 10) tweet\_date,  
COUNT(1) tweet\_count  
FROM mbta\_info  
GROUP BY SUBSTR(created\_at, 0, 10)  
ORDER BY COUNT(1) DESC  
LIMIT 5;

13. ('select distinct UserName,Status\_Count from mbta where UserName="MBTA"')  
 $\pi$  UserName, Status\_Count  $\sigma$  UserName=MBTA(mbta)

14. select distinct UserName,listed\_counted from mbta where UserName="MBTA"  
 $\pi$  UserName, listed\_counted  $\sigma$  UserName=MBTA(mbta)

15. 'select distinct UserName,Location,Status\_Count from mbta where location="Boston, MA"  
 $\pi$  UserName, ,Location,Status\_Count  $\sigma$  location=Boston, MA

MBTA(mbta)

16. ('select \* from mbta where Text like "%South%" ')

$\pi$  UserName,text  $\sigma$  text =North (mbta)

17. select distinct Username,followers from result'  
 $\pi$  Username,followers (result)

18. select distinct Username,Verification from result where Verification=1'  
 $\pi$  Username,Verification  $\sigma$  Verification=1(result)

19. 'select distinct Username,Source from result'  
 $\pi$  Username,Source (result)

20. 'select distinct language, Username from result'  
 $\pi$  language, Username (result)

21. 'select Username,Text,max(Number\_of\_Likes) from result'  
Gmax (Number\_of\_Likes)  $\pi$  Username,Text (result)

22. select \* from result where Text like "%@uber%"  
 $\pi$  Text  $\sigma$  Text like "%@uber%"

23. ('select count(\*) from result where Text like "%@uber%" ')  
Gcount (Text like "%@uber%") (result)

24. ('select \* from result where Text like "%@lyft%" ')  
 $\pi$  Text  $\sigma$  Text like "%@lyft%"

25. ('select count(\*) from result where Text like "%@lyft%" ')  
Gcount (Text like "%@lyft%" (result)

