

PROJECT\_2  
Submission date: 4/16/18

CSCI\_331  
ID-8799

SAUD AHMED

```
create table Reporter
(rid number primary key,
rfirst varchar(30) not null,
rlast varchar(30) not null,
```

```
salary decimal(15,2));
```

```
create table Office
(oid number primary key,
offstreet varchar(30) not null,
city varchar(30) not null,
state char(2),
zip char(5),
country varchar(30) not null,
office_status varchar(30) not null,
```

```
rid number,
office_status
foreign key(rid) references Reporter (rid));
```

```
create table Reporter_Office (
rid number,
oid number,
foreign key (rid) references Reporter (rid),
foreign key (oid) references Office (oid));
```

```
create table photo (  
pid number primary key,  
photo_title varchar(30) not null,  
path varchar(30),  
photo_taken_date date  
);
```

```
create table topic (  
tid number primary key,  
topic_name varchar(30) not null  
);
```

```
create table Articles  
(aid number primary key,  
title varchar(50) not null,  
publish_date date,  
section varchar(30) not null,  
body varchar(100) default null,  
status varchar(30) not null,  
rid number,  
pid number,  
oid number,  
tid number,  
foreign key (rid) references Reporter(rid),  
foreign key (pid) references photo(pid),  
foreign key (oid) references Office(oid),  
foreign key (tid) references topic(tid));
```

```
create table Articles_Reporters
(aid number,
rid number,
foreign key (aid) references Articles(aid),
foreign key (rid) references Reporter(rid)
);

create table CS331_PROJECT2.ASSIN_OFFICE (
assid NUMBER primary key,
aasin_salary DECIMAL (20,2) not null,
assin_location VARCHAR2(19) not null,
oid number,
aid number,
foreign key (aid) references Articles(aid),
foreign key (oid) references Office (oid))
```

```
create table Articles_Office
(aid number,
oid number,
foreign key (aid) references Articles(aid),
foreign key (oid) references Office(oid));
```

```
create table Articles_photo
(pid number,
aid number,
foreign key (aid) references Articles(aid),
foreign key (pid) references photo(pid));
```

```
create table Articles_topic
(aid number,
tid number,
foreign key (aid) references Articles(aid),
foreign key (tid) references topic(tid));
insert into topic  ( tid, topic_name  )
values ( 1000, 'Aisa');
insert into topic  ( tid, topic_name  )
values ( 1001, 'Money');
```

----Insert data for topic table-----

```
insert into topic  ( tid, topic_name  )
values ( 1002, 'International Politics');
```

```
insert into topic  ( tid, topic_name  )
values ( 1003, 'International War');
```

```
insert into topic  ( tid, topic_name  )
values ( 1004, 'SPORTS');
```

```
insert into topic  ( tid, topic_name  )
values ( 1005, 'Election');
```

```
insert into topic  ( tid, topic_name  )
values ( 1006, 'State News');
```

```
insert into topic  ( tid, topic_name  )
values ( 1007, 'Middle East');
```

```
insert into topic  ( tid, topic_name  )
```

```
values ( 1008, 'Mars');
```

```
insert into topic ( tid, topic_name )  
values ( 1009, 'Weather');
```

```
insert into topic ( tid, topic_name )  
values ( 1010, 'TRUMP');
```

```
insert into topic ( tid, topic_name )  
values ( 1011, 'Local News');
```

----Insert data for photo table-----

```
insert into photo ( pid, photo_title , path ,photo_taken_date )  
values ( 200, 'SUNY', 'c/dir/photo/png1, '12/31/16');
```

```
insert into photo ( pid, photo_title , path ,photo_taken_date )  
values ( 201, 'Wall St', 'c/dir/photo/png2', '12/31/17');
```

```
insert into photo ( pid, photo_title , path ,photo_taken_date )  
values ( 202, 'Indian Beauty', 'c/dir/photo/png3', '12/31/18');
```

```
insert into photo ( pid, photo_title , path ,photo_taken_date )  
values ( 203, 'USA natural Beauty', 'c/dir/photo/png4', '12/31/14');
```

```
insert into photo ( pid, photo_title , path ,photo_taken_date )
```

```
values ( 204, 'Ocean Color', 'c/dir/photo/png5', '12/31/15');
insert into photo ( pid, photo_title , path ,photo_taken_date )
values ( 205, 'Skin Color', 'c/dir/photo/png6', '12/31/17');
insert into photo ( pid, photo_title , path ,photo_taken_date )
values ( 206, 'Brain Wash', 'c/dir/photo/png7', '12/31/18');

insert into photo ( pid, photo_title , path ,photo_taken_date )
values ( 207, 'AI', 'c/dir/photo/png8', '11/1/18');
insert into photo ( pid, photo_title , path ,photo_taken_date )
values ( 208, 'Aquaman', 'c/dir/photo/png9', '1/1/18');

insert into photo ( pid, photo_title , path ,photo_taken_date )
values ( 209, 'Aquaman Final Fight', 'c/dir/photo/png10', '1/1/19'
```

```
---insertion for CS331_PROJECT2.assin_office table-----
insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('804', '800000000.25', '20 awal st LV','115' , '911' );
insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('805', '600000000.25', '22 kal st BD','114' , '912' );
insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('806', '600000000.25', '25 hall st SE','115' , '919' );
insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('807', '700000000.25', '25 hall st SE','115' , '919' );
```

```
insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('808', '300000000.25', '55 hall dr LA','116' , '918' );

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('809', '200000000.25', '676 hall dr CA','112' , '903' );

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('811', '9999999.25', '999 Hill dr JA','112' , '904' );

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('812', '8999999.25', '9 Holl dr QU','111' , '907' );

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('813', '999999.25', '6 Holl dr PA','114' , '913' );

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('814', '6699999.25', '66 ERill dr AZ','111' , '911' );

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('801', '800000000.25', ' 200 wall st New York', '112' , '902'
);

insert into CS331_PROJECT2.assin_office( ASSID, AASIN_SALARY,
ASSIN_LOCATION, oid, aid)
VALUES ('802', '8888000.25', '777 WALL st Bangladesh','113' , '905' );

----Other SQL Command used in this project-----

Update Articles
set publish_date = ''
where aid = 919;

Update Articles
set status = 'draft'
where aid = 918;
```



```
Select * from articles  
desc assin_office
```

-----Since Database doesn't hold History more than 200 rows-----

-----inserted data table of Reporter -----

RID	RFIRST	RLAST	SALARY
1	Xman	Ahmed	1000
2	Yman	Chan	5000
16	Ray	Yoo	91000
15	Roy	Kheen	89990
3	Bo	Sally	400000
4	Fo	Bolle	900000
5	Iron	Bal	9100000
6	Bisnu	Bal	45600
7	Bisnu	Bal	45600
8	Ryan	Richei	99600

-----inserted data table of articles -----

AID	TITLE	P U B L I S H - D A T E	SECTION	BODY	STATUS	R I D	P I D	O I D	TI D	PAGE_ NUMBER
900	Trump Urged Official	1 2 / 0	White House	Trump offered to pardon	Published	1	2 0 6	1 1 5	10 01	1

	to close Border	4 / 0 0 1 9		Homelan d Securit y head if law broken while closing border						
902	Sudan General Steps Down	1 2 / 0 4 / 0 0 1 9	Middle East	The day after Preside nt Omar Hassan al- Bashir was ousted by his defense ministe r	Publi shed	2	2 0 5	1 1 4	10 02	3
903	China Enlarges Its Circle in Europe	0 1 / 0 4 / 0 0 1 8	Aisa	China's premier surveye d constru ction of a long- sought bridge over Croatia 's Mali Ston Bay	Publi shed	3	2 0 4	1 1 3	10 03	3
904	Former Lakers coach Luke Walton	1 2 / 0 4 / 0	Baseke tball	Walton gets to depart a basketb all team	Publi shed	4	2 0 5	1 1 3	10 04	10

	might Win	0 1 8		being run, occasio nally, when he feels like it						
905	Sanders campaign organize s nearly 4,000 parties	0 1 / 0 4 / 0 0 1 8	Electi on2020	Sen. Bernie Sanders ' army of volunte ers has signed up to host about 3,900 organiz ing parties	Publi shed	1 0	2 3	1 1 2	10 05	2
910	landmark research for an eventual Mars mission	-	Techno logy	The effects of extende d spacefl ight on the human body	Draft	1 1	2 0 5	1 1 5	10 08	15
917	Failing New York Subway	-	New York	New York's first subway station opened in 1904 under City Hall	Publi shed	1 5	2 0 5	1 1 5	10 06	20

906	landmark research for an eventual Mars mission	-	Technology	The effects of extended spaceflight on the human body	Draft	1 1	2 0 5	1 1 5	10 08	15
907	Why you should sell your home in 2019	0 4 / 0 4 / 0 0 1 9	Money	2019 might be the best time for you to put your house on the market	Published	1 2	2 0 1	1 1 1	10 01	25
911	Mars Helicopter Complete Flight Tests	1 2 / 0 7 / 0 0 1 5	Technology	The first helicopter to fly on Mars had its first flight on Earth	Published	1 2	2 0 4	1 1 1	10 08	15

-----inserted data table of office -----

OID	OFFSTREET	CITY	STATE	ZIP	COUNTRY	RID	OFFICE_STATUES
111	15 main st	Queens	NY	11432	USA	2	ACTIVE
112	115 Wall st	New York	NY	10001	USA	2	ACTIVE
113	115 Motij eel rd	Dhaka	BD	01214	BANGLADESH	10	ACTIVE
114	100 Norsb org rd	Stockholm	SE	70211	Sweden	12	ACTIVE
115	222 main strip rd	Las Vegas	LV	72900	USA	11	ACTIVE
116	666 Jamai ca rd	Brox	NY	11400	USA	10	ACTIVE

-----inserted data table of photo -----

PID	PHOTO_TITLE	PATH	PHOTO_TAKEN_DATE
200	SUNY	c/dir/photo/png1	12/31/0016
201	Wall St	c/dir/photo/png2	12/31/0017
202	Indian Beauty	c/dir/photo/png3	12/31/0018
203	USA natural Beauty	c/dir/photo/png4	12/31/0014
204	Ocean Color	c/dir/photo/png5	12/31/0015
205	Skin Color	c/dir/photo/png6	12/31/0017
206	Brain Wash	c/dir/photo/png7	12/31/0018
207	AI	c/dir/photo/png8	11/01/0018
208	Aquaman	c/dir/photo/png9	01/01/0018
209	Aquaman Final Fight	c/dir/photo/png10	01/01/0019

Question 1: Identify published articles in the last 15 months about State News and SPORTS.

Display the article title, publish date and authors.

```
select title"Article Title",publish_date"Publish Date",
rfirst"Reporter First Name" , rlast"Reporter Last Name"
```

```
from Articles, topic, Reporter
```

```
where reporter.rid = articles.rid
```

```
AND topic.tid = articles.tid
```

```
AND publish_date < '1/31/0019'
```

```
AND (topic_name = 'State News'
```

```
or topic_name = 'SPORTS');
```

Article Title	Publish Date	Reporter First Name	Reporter Last Name
Stephen Curry Has a Popcorn Problem	12/31/0018	Roy	Kheen
Former Lakers coach Luke Walton might Win	12/04/0018	Fo	Bolle
The Subway Fare Rises on April 21	12/31/0018	Roy	Kheen
Trump Declares a National Emergency	12/31/0018	Shoon	Bon
Rock and Jazz Concerts to Check Out in	12/10/0018	Roy	Kheen



Q2: Identify articles in the last five year about the topic Mars and the article body includes references to on Earth and first flight. Display the article title and publish date. Use a nested select to answer this question. Order the articles chronologically

```
Answer: select title"Article Title",publish_date"Publish Date"
from Articles
where tid IN ( select tid
               from topic
               where topic_name like '%Mars%'
               And body like '%on Earth%'
               And body like '% first flight%'

               And publish_date > '12/07/0014'
);
```

Article Title	Publish Date
Mars Helicopter Completes Flight Tests	12/07/0015

Question 3: Identify topics not assigned to published articles in the last four years. Display the topics. Use a nested select to answer this question.

```
select topic_name "Topics"
from topic
where tid Not In ( select tid
                   from Articles
                   where articles.tid = topic.tid
                   and publish_date between '01/01/14' and '12/31/18');
```

Topics
Money
International Politics
Middle East
Weather
TRUMP
Local News

q4: Identify the top five topics in the last 3 years. Display two columns: topic and number of articles. Display the topic with the most articles first. Display one row for each distinct topic. Use a function to answer this question.

```
select topic_name, count(*) "Number Of Articles"
from topic, Articles
where articles.tid = topic.tid
and publish_date between '12/12/15' and '12/31/18'
group by topic_name
```

```
order by 2 desc;
```

TOPIC_NAME	Number Of Articles
State News	3
SPORTS	2
International War	1
Election	1
Aisa	1

q5: Identify the number of articles by reporter in the last six years. Display three columns: Reporter, year published and number of articles. Display one row for each distinct reporter and year. Order the output by reporter name. Use a function to answer this question.

Answer:

```
select rfirst"Reporter", rlast"Name", a.PUBLISH_DATE, COUNT(*)"Number
of Articles"
from CS331_PROJECT2.REPORTER r, CS331_PROJECT2.ARTICLES a
where a.rid = r.RID
AND a.PUBLISH_DATE >= '12/12/0013'
GROUP by a.RID, rfirst, rlast, a.PUBLISH_DATE
Order by 4 desc
;
```

Reporter	Name	PUBLISH_DATE	Number of Articles
Roy	Kheen	12/31/0018	2
Xman	Ahmed	12/04/0019	1
Yman	Chan	12/04/0019	1
Roy	Kheen	12/10/0018	1

Cheen	Lexon	04/04/0019	1
Cheen	Lexon	12/07/0015	1
Shoon	Bon	12/31/0018	1
Bo	Sally	01/04/0018	1
Super	Man	01/04/0018	1
Cheen	Lexon	12/30/0018	1

q6: Identify photo only articles about the Technology in the last six months. Display the article title and publish date. Use a nested select to answer this question. Note, a photo only article has no text in the body and a photo.

```
select title, publish_date
from CS331_PROJECT2.ARTICLES, CS331_PROJECT2.PHOTO
where articles.pid = photo.pid
And articles.section = 'Technology'
and articles.publish_date >= '12/12/16'
AND articles.pid in (
select pid
from CS331_PROJECT2.PHOTO
where photo_taken_date > '12/12/16');
```

TITLE	PUBLISH_DATE
Facebook Tracking everything, we do	04/15/0019

q7: Identify New York reporters with no completed or draft articles in the last six months. Display the reporter. Order the output by reporter name. Use a nested select to answer this question.

```
select r.RFIRST"Reporter", r.RLAST"Name"
from CS331_PROJECT2.REPORTER r
where r.RID IN (
```

```

select RID
from CS331_PROJECT2.ARTICLES a
where a.STATUS = 'Draft'
or a.PUBLISH_DATE > '12/12/12')
and RID in ( select rid
from office
where STATE ='LV'
)

```

Reporter	Name
Jhon	Lee

Q8: Identify all articles published in Last December. Display the section, article title, authors, topics and page numbers. Order the output by section, page number (where the article appears in the newspaper) and article title.

```

select section"Section Of Newspaper", title"Title", rfirst"Reporter",
rlast"Name", topic_name"Topic", page_number"Number of Page"

```

```

from CS331_PROJECT2.REPORTER r, CS331_PROJECT2.ARTICLES a,
CS331_PROJECT2.TOPIC t

```

```

where a.rid = r.rid

```

```

and a.tid = t.tid

```

```

and publish_date BETWEEN '12/01/18' AND '12/31/18'

```

```

;

```

Section of Newspaper	Title	Reporter	Name	Topic	Number of Page
New York	The Subway Fare Rises on April 21	Roy	Kheen	State News	20
New York	Rock and Jazz Concerts to Check Out in	Roy	Kheen	State News	20
Sports	Stephen Curry Has a Popcorn Problem	Roy	Kheen	SPORTS	10

Baseketball	Former Lakers coach Luke Walton might Win	Fo	Bolle	SPORTS	10
Asia	Shrugs in the Face of Layoffs	Cheen	Lexon	Aisa	19
Politics	Trump Declares a National Emergency	Shoon	Bon	State News	1

Q9: Identify articles published today without a topic. Display the article and authors. Use a nested select to answer this question.

```
select rfirst"Reporter", rlast"Name", title
from CS331_PROJECT2.REPORTER r, CS331_PROJECT2.ARTICLES a
where r.rid = a.RID
or tid not in (
select tid
from CS331_PROJECT2.ARTICLES
)
;
```

Reporter	Name	TITLE
Xman	Ahmed	Trump Urged Official to close Border
Yman	Chan	Sudan General Steps Down
Ray	Yoo	Tracking Phones, Google Is a Dragnet
Ray	Yoo	Facebook Tracking everything, we do
Roy	Kheen	Failing New York Subway
Roy	Kheen	Stephen Curry Has a Popcorn Problem
Roy	Kheen	Rock and Jazz Concerts to Check Out in
Roy	Kheen	The Subway Fare Rises on April 21
Roy	Kheen	Failing Parking System

Bo	Sally	China Enlarges Its Circle in Europe
----	-------	-------------------------------------

Q10: Identify number of articles and the total salary by office in whole life. Display three columns: office location, number of articles and total salary. Display one row for each distinct office. The office with the highest salary will be displayed first. Use a function to answer this question.

```
Select ASSIN_LOCATION "DISTICT OFFICE" , SUM(AASIN_SALARY) , COUNT(*) "#
of Article In DISTICT OFFICE"
```

```
from CS331_PROJECT2.ASSIN_OFFICE s , CS331_PROJECT2.ARTICLES a
```

```
where s.AID = a.AID
```

```
GROUP BY s.ASSIN_LOCATION
```

```
ORDER BY 3 desc;
```

	⚡ DISTICT OFFICE	⚡ SUM(AASIN_SALARY)	⚡ # of Article In DISTICT OFFICE
1	25 hall st SE	1300000000.5	2
2	676 hall dr CA	200000000.25	1
3	55 hall dr LA	300000000.25	1
4	6 Holl dr PA	999999.25	1
5	666 main st London	90000000.25	1
6	22 kal st BD	600000000.25	1
7	888 mall dr OH	500000000.25	1
8	20 awal st LV	800000000.25	1
9	999 Hill dr JA	9999999.25	1
10	9 Holl dr QU	8999999.25	1
11	66 ERill dr AZ	6699999.25	1
12	15 main st New York	100000000.25	1

Q11. Close the Dhaka office and re-assign all reporters to the New York office. Identify the SQL code to implement.

-----Before table Loolo-----

OI D	OFFSTREE T	CITY	STAT E	ZIP	COUNTRY	RI D	OFFICE_STATUE S
11 1	15 main st	Queens	NY	1143 2	USA	2	ACTIVE
11 2	115 Wall st	New York	NY	1000 1	USA	2	ACTIVE
11 3	115 Motijeel rd	Dhaka	BD	0121 4	BANGLADES H	10	ACTIVE
11 4	100 Norsborg rd	Stockhol m	SE	7021 1	Sweden	12	ACTIVE
11 5	222 main strip rd	Las Vegas	LV	7290 0	USA	11	ACTIVE
11 6	666 Jamaica rd	Brox	NY	1140 0	USA	10	ACTIVE

Update CS331\_PROJECT2.OFFICE

SET OFFICE\_STATUES = 'CLOSE'

where CITY = 'Dhaka' ;

-----This Update Change the OFFICE\_STATUES to close where City ( assuming this is the office name I haven't include at the beginning of the project-----

Update CS331\_PROJECT2.OFFICE

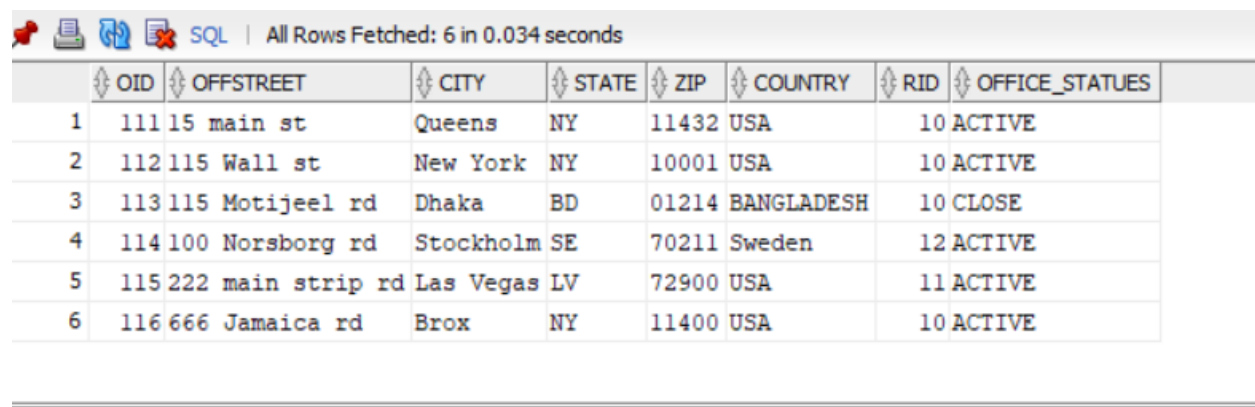


```

SET rid = ( select rid
from CS331_PROJECT2.OFFICE
where City = 'Dhaka')
where rid IN (select rid
from CS331_PROJECT2.OFFICE
where city In ( 'New York')
)
;

```

-----After Update Operation Table Office Looks Like this ---



	OID	OFFSTREET	CITY	STATE	ZIP	COUNTRY	RID	OFFICE_STATUES
1	111	15 main st	Queens	NY	11432	USA	10	ACTIVE
2	112	115 Wall st	New York	NY	10001	USA	10	ACTIVE
3	113	115 Motijeel rd	Dhaka	BD	01214	BANGLADESH	10	CLOSE
4	114	100 Norsborg rd	Stockholm	SE	70211	Sweden	12	ACTIVE
5	115	222 main strip rd	Las Vegas	LV	72900	USA	11	ACTIVE
6	116	666 Jamaica rd	Brox	NY	11400	USA	10	ACTIVE

Q12. Display the structure of ALL tables using SQL Describe

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<a href="#">ARTICLES</a>	<a href="#">AID</a>	NUMBER	22	-	-	1	-	-	-
	<a href="#">TITLE</a>	VARCHAR2	50	-	-	-	-	-	-
	<a href="#">PUBLISH DATE</a>	DATE	7	-	-	-	✓	-	-

	<a href="#">SECTION</a>	VARCHAR2	30	-	-	-	-	-	-
	<a href="#">BODY</a>	VARCHAR2	100	-	-	-	✓	null	-
	<a href="#">STATUS</a>	VARCHAR2	30	-	-	-	-	-	-
	<a href="#">RID</a>	NUMBER	22	-	-	-	✓	-	-
	<a href="#">PID</a>	NUMBER	22	-	-	-	✓	-	-
	<a href="#">OID</a>	NUMBER	22	-	-	-	✓	-	-
	<a href="#">TID</a>	NUMBER	22	-	-	-	✓	-	-
	<a href="#">PAGE NUMBER</a>	NUMBER	22	-	-	-	✓	-	-
1 - 11									

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<a href="#">TOPIC</a>	<a href="#">TID</a>	NUMBER	22	-	-	1	-	-	-
	<a href="#">TOPIC NAME</a>	VARCHAR2	30	-	-	-	-	-	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<a href="#">REPORTER</a>	<a href="#">RID</a>	NUMBER	22	-	-	1	-	-	-

	<a href="#">RFI</a> <a href="#">RST</a>	VARCH AR2	30	-	-	-	-	-	-
	<a href="#">RLA</a> <a href="#">ST</a>	VARCH AR2	30	-	-	-	-	-	-
	<a href="#">SAL</a> <a href="#">ARY</a>	NUMBE R	-	15	2	-	✓	-	-
									1 - 4

Table	Col umn	Data Type	Len gth	Preci sion	Sca le	Primar y Key	Null able	Defa ult	Comm ent
<a href="#">ARTICLES</a> <a href="#">OFFICE</a>	<a href="#">AID</a>	NUMBE R	22	-	-	-	✓	-	-
	<a href="#">OID</a>	NUMBE R	22	-	-	-	✓	-	-

Table	Col umn	Data Type	Len gth	Preci sion	Sca le	Primary Key	Nulla ble	Defa ult	Comm ent
<a href="#">REPOR</a> <a href="#">TER</a>	<a href="#">RID</a>	NUMBE R	22	-	-	1	-	-	-
	<a href="#">RFI</a> <a href="#">RST</a>	VARCH AR2	30	-	-	-	-	-	-
	<a href="#">RLA</a> <a href="#">ST</a>	VARCH AR2	30	-	-	-	-	-	-
	<a href="#">SAL</a> <a href="#">ARY</a>	NUMBE R	-	15	2	-	✓	-	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>OFFICE</u>	<u>OID</u>	NUMBER	22	-	-	1	-	-	-
	<u>OFFSTREET</u>	VARCHAR2	30	-	-	-	-	-	-
	<u>CITY</u>	VARCHAR2	30	-	-	-	-	-	-
	<u>STATE</u>	CHAR	2	-	-	-	✓	-	-
	<u>ZIP</u>	CHAR	5	-	-	-	✓	-	-
	<u>COUNTRY</u>	VARCHAR2	30	-	-	-	-	-	-
	<u>RID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>OFFICES</u> <u>TATUS</u>	VARCHAR2	30	-	-	-	✓	Null	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>REPORTER OFFICE</u>	<u>RID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>OID</u>	NUMBER	22	-	-	-	✓	-	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>PHOTO</u>	<u>PID</u>	NUMBER	22	-	-	1	-	-	-
	<u>PHOTO TITLE</u>	VARCHAR2	30	-	-	-	-	-	-
	<u>PATH</u>	VARCHAR2	30	-	-	-	✓	-	-
	<u>PHOTO TAKEN DATE</u>	DATE	7	-	-	-	✓	-	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>ARTICLES</u> <u>PHOTO</u>	<u>PID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>AID</u>	NUMBER	22	-	-	-	✓	-	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<a href="#">ARTICLES TOPIC</a>	<a href="#">AID</a>	NUMBER	22	-	-	-	✓	-	-
	<a href="#">TID</a>	NUMBER	22	-	-	-	✓	-	-

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<a href="#">ASSIN OFFICE</a>	<a href="#">ASSID</a>	NUMBER	22	-	-	1	-	-	-
	<a href="#">AASIN SALARY</a>	NUMBER	-	20	2	-	-	-	-
	<a href="#">ASSIN LOCATION</a>	VARCHAR2	19	-	-	-	-	-	-
	<a href="#">OID</a>	NUMBER	22	-	-	-	✓	-	-
	<a href="#">AID</a>	NUMBER	22	-	-	-	✓	-	-

Q13. select \* from v\$version;

BANNER
Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production
PL/SQL Release 11.2.0.2.0 - Production
CORE 11.2.0.2.0 Production
TNS for 64-bit Windows: Version 11.2.0.2.0 - Production
NLSRTL Version 11.2.0.2.0 - Production

