SAUD AHMED

PROJECT\_2  
Submission date: 4/16/18

CSCI\_331

ID-8799

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\_statues 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** | **PUBLISH\_DATE** | **SECTION** | **BODY** | **STATUS** | **RID** | **PID** | **OID** | **TID** | **PAGE\_NUMBER** |
| 900 | Trump Urged Official to close Border | 12/04/0019 | White House | Trump offered to pardon Homeland Security head if law broken while closing border | Published | 1 | 206 | 115 | 1001 | 1 |
| 902 | Sudan General Steps Down | 12/04/0019 | Middle East | The day after President Omar Hassan al-Bashir was ousted by his defense minister | Published | 2 | 205 | 114 | 1002 | 3 |
| 903 | China Enlarges Its Circle in Europe | 01/04/0018 | Aisa | China’s premier surveyed construction of a long-sought bridge over Croatia’s Mali Ston Bay | Published | 3 | 204 | 113 | 1003 | 3 |
| 904 | Former Lakers coach Luke Walton might Win | 12/04/0018 | Baseketball | Walton gets to depart a basketball team being run, occasionally, when he feels like it | Published | 4 | 205 | 113 | 1004 | 10 |
| 905 | Sanders campaign organizes nearly 4,000 parties | 01/04/0018 | Election2020 | Sen. Bernie Sanders’ army of volunteers has signed up to host about 3,900 organizing parties | Published | 10 | 203 | 112 | 1005 | 2 |
| 910 | landmark research for an eventual Mars mission | - | Technology | The effects of extended spaceflight on the human body | Draft | 11 | 205 | 115 | 1008 | 15 |
| 917 | Failing New York Subway | - | New York | New York’s first subway station opened in 1904 under City Hall | Published | 15 | 205 | 115 | 1006 | 20 |
| 906 | landmark research for an eventual Mars mission | - | Technology | The effects of extended spaceflight on the human body | Draft | 11 | 205 | 115 | 1008 | 15 |
| 907 | Why you should sell your home in 2019 | 04/04/0019 | Money | 2019 might be the best time for you to put your house on the market | Published | 12 | 201 | 111 | 1001 | 25 |
| 911 | Mars Helicopter Completes Flight Tests | 12/07/0015 | Technology | The first helicopter to fly on Mars had its first flight on Earth | Published | 12 | 204 | 111 | 1008 | 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 Motijeel rd | Dhaka | BD | 01214 | BANGLADESH | 10 | ACTIVE |
| 114 | 100 Norsborg rd | Stockholm | SE | 70211 | Sweden | 12 | ACTIVE |
| 115 | 222 main strip rd | Las Vegas | LV | 72900 | USA | 11 | ACTIVE |
| 116 | 666 Jamaica 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.

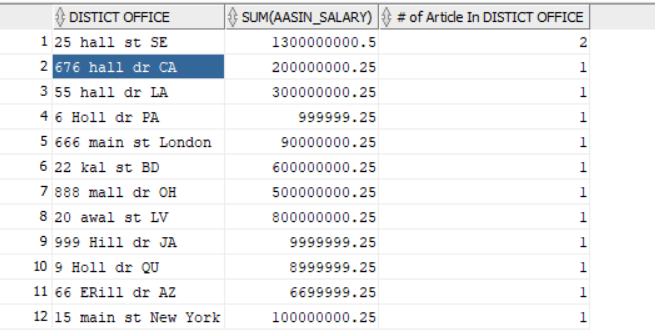
Select ASSIN\_LOCATION"DISTICT OFFICE" ,SUM(AASIN\_SALARY) ,COUNT(\*)"# of Article In DISTICT OFFICE"

from CS331\_PROJECT2.ASSIN\_OFFICE s , CS331\_PROJECT2.ARTICLES a

where s.AID = a.AID

GROUP BY s.ASSIN\_LOCATION

ORDER BY 3 desc;



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

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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 Motijeel rd | Dhaka | BD | 01214 | BANGLADESH | 10 | ACTIVE |
| 114 | 100 Norsborg rd | Stockholm | SE | 70211 | Sweden | 12 | ACTIVE |
| 115 | 222 main strip rd | Las Vegas | LV | 72900 | USA | 11 | ACTIVE |
| 116 | 666 Jamaica rd | Brox | NY | 11400 | 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

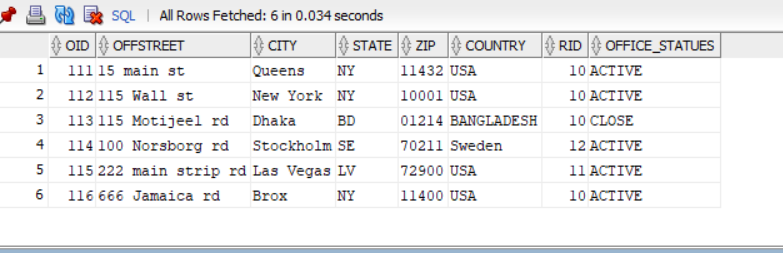
from CS331\_PROJECT2.OFFICE

where city In ( 'New York')

)

;

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



Q12. Display the structure of ALL tables using SQL Describe

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [ARTICLES](javascript:ret_Column('CS331_PROJECT2.ARTICLES');) | [AID](javascript:ret_Column('AID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [TITLE](javascript:ret_Column('TITLE');) | VARCHAR2 | 50 | - | - | - | - | - | - |
|  | [PUBLISH\_DATE](javascript:ret_Column('PUBLISH_DATE');) | DATE | 7 | - | - | - | nullable | - | - |
|  | [SECTION](javascript:ret_Column('SECTION');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [BODY](javascript:ret_Column('BODY');) | VARCHAR2 | 100 | - | - | - | nullable | null | - |
|  | [STATUS](javascript:ret_Column('STATUS');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [RID](javascript:ret_Column('RID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [PID](javascript:ret_Column('PID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [OID](javascript:ret_Column('OID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [TID](javascript:ret_Column('TID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [PAGE\_NUMBER](javascript:ret_Column('PAGE_NUMBER');) | NUMBER | 22 | - | - | - | nullable | - | - |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  | 1 - 11 |  |  | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [TOPIC](javascript:ret_Column('CS331_PROJECT2.TOPIC');) | [TID](javascript:ret_Column('TID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [TOPIC\_NAME](javascript:ret_Column('TOPIC_NAME');) | VARCHAR2 | 30 | - | - | - | - | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [REPORTER](javascript:ret_Column('CS331_PROJECT2.REPORTER');) | [RID](javascript:ret_Column('RID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [RFIRST](javascript:ret_Column('RFIRST');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [RLAST](javascript:ret_Column('RLAST');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [SALARY](javascript:ret_Column('SALARY');) | NUMBER | - | 15 | 2 | - | nullable | - | - |
| |  |  |  |  | | --- | --- | --- | --- | |  |  | 1 - 4 |  | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [ARTICLES\_OFFICE](javascript:ret_Column('CS331_PROJECT2.ARTICLES_OFFICE');) | [AID](javascript:ret_Column('AID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [OID](javascript:ret_Column('OID');) | NUMBER | 22 | - | - | - | nullable | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [REPORTER](javascript:ret_Column('CS331_PROJECT2.REPORTER');) | [RID](javascript:ret_Column('RID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [RFIRST](javascript:ret_Column('RFIRST');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [RLAST](javascript:ret_Column('RLAST');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [SALARY](javascript:ret_Column('SALARY');) | NUMBER | - | 15 | 2 | - | nullable | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [OFFICE](javascript:ret_Column('CS331_PROJECT2.OFFICE');) | [OID](javascript:ret_Column('OID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [OFFSTREET](javascript:ret_Column('OFFSTREET');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [CITY](javascript:ret_Column('CITY');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [STATE](javascript:ret_Column('STATE');) | CHAR | 2 | - | - | - | nullable | - | - |
|  | [ZIP](javascript:ret_Column('ZIP');) | CHAR | 5 | - | - | - | nullable | - | - |
|  | [COUNTRY](javascript:ret_Column('COUNTRY');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [RID](javascript:ret_Column('RID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [OFFICE\_STATUES](javascript:ret_Column('OFFICE_STATUES');) | VARCHAR2 | 30 | - | - | - | nullable | Null | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [REPORTER\_OFFICE](javascript:ret_Column('CS331_PROJECT2.REPORTER_OFFICE');) | [RID](javascript:ret_Column('RID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [OID](javascript:ret_Column('OID');) | NUMBER | 22 | - | - | - | nullable | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [PHOTO](javascript:ret_Column('CS331_PROJECT2.PHOTO');) | [PID](javascript:ret_Column('PID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [PHOTO\_TITLE](javascript:ret_Column('PHOTO_TITLE');) | VARCHAR2 | 30 | - | - | - | - | - | - |
|  | [PATH](javascript:ret_Column('PATH');) | VARCHAR2 | 30 | - | - | - | nullable | - | - |
|  | [PHOTO\_TAKEN\_DATE](javascript:ret_Column('PHOTO_TAKEN_DATE');) | DATE | 7 | - | - | - | nullable | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [ARTICLES\_PHOTO](javascript:ret_Column('CS331_PROJECT2.ARTICLES_PHOTO');) | [PID](javascript:ret_Column('PID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [AID](javascript:ret_Column('AID');) | NUMBER | 22 | - | - | - | nullable | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [ARTICLES\_TOPIC](javascript:ret_Column('CS331_PROJECT2.ARTICLES_TOPIC');) | [AID](javascript:ret_Column('AID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [TID](javascript:ret_Column('TID');) | NUMBER | 22 | - | - | - | nullable | - | - |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table** | **Column** | **Data Type** | **Length** | **Precision** | **Scale** | **Primary Key** | **Nullable** | **Default** | **Comment** |
| [ASSIN\_OFFICE](javascript:ret_Column('CS331_PROJECT2.ASSIN_OFFICE');) | [ASSID](javascript:ret_Column('ASSID');) | NUMBER | 22 | - | - | 1 | - | - | - |
|  | [AASIN\_SALARY](javascript:ret_Column('AASIN_SALARY');) | NUMBER | - | 20 | 2 | - | - | - | - |
|  | [ASSIN\_LOCATION](javascript:ret_Column('ASSIN_LOCATION');) | VARCHAR2 | 19 | - | - | - | - | - | - |
|  | [OID](javascript:ret_Column('OID');) | NUMBER | 22 | - | - | - | nullable | - | - |
|  | [AID](javascript:ret_Column('AID');) | NUMBER | 22 | - | - | - | nullable | - | - |

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 |