Home Work 4: Oracle SQL Class

# Research

In your own words give a brief definition of CRUD as it relates to databases.

In your own words give a brief definition of ACID as it relates to databases.

In your own words give a brief definition of Atomicity as it relates to databases.

In your own words give a brief definition of Drilling Down as it relates to databases.

In your own words give a brief definition of Granularity as it relates to databases.

# DECODE

|  |  |
| --- | --- |
| **SCORES** | |
| **Student\_id** | **Score** |
| 2122 | 54 |
| 3211 | 92 |
| 411 | 80 |
| 2771 | 77 |
| 2098 | 64 |
| 7890 | 0 |

Create a table called scores.

Enter the data above.

Write a SQL statement using the decode function from Chapter 6 that gives a result set showing:

Sudent\_id

Score

Letter Grade

Where the letter grade is A if score 90-100; B if score 80-89;

C if score 70-79; D if score 60-69; INC if score 0-59;

# Transform null

Using Orders table in Books, write a SQL statement that returns “Not Shipped” if the shipdate is null.

select shipdate,

decode (

shipdate,

null , 'Not Shipped',

shipdate

)

from orders;

# Transform date, number

Create a table called invoices and insert the following rows. In the insert statement use

to\_date to change string ‘3/15/2009’ to a date

to\_number to change string ‘147119’ to a number

|  |  |  |  |
| --- | --- | --- | --- |
| INVOICES | | | |
| Inv\_id | inv\_date | inv\_amt | Acct\_no |
| 701 | 3/15/2009 | 147119 | 0CODDA15 |
| 702 | 6/17/2010 | 275803 | CODDA12 |
| 703 | 10/18/2010 | 248414 | CODDA20 |
| 704 | 1/19/2009 | 169206 | CODDA18 |
| 705 | 9/18/2011 | 102680 | CODDA12 |
| 706 | 11/4/2010 | 179138 | CODDA17 |
| 707 | 12/13/2011 | 270723 | CODDA18 |
| 708 | 9/15/2010 | 130288 | CODDA13 |
| 709 | 3/21/2010 | 255003 | CODDA18 |
| 710 | 4/13/2009 | 254837 | CODDA19 |
| 711 | 6/30/2010 | 284695 | CODDA19 |
| 712 | 11/20/2010 | 297928 | CODDA19 |

create table invoices

(id integer,

inv\_date date,

inv\_amt number (9,2),

acct\_no varchar2(25));

delete invoices;

insert into invoices values (701,to\_date('03/15/2009','mm/dd/yyyy'),147119,'0CODDA15');

insert into invoices values(702,to\_date('06/17/2010','mm/dd/yyyy'),275803,'CODDA12');

insert into invoices values(703,to\_date('10/18/2010','mm/dd/yyyy'),248414,'CODDA20');

insert into invoices values(704,to\_date('01/19/2009','mm/dd/yyyy'),169206,'CODDA18');

insert into invoices values(705,to\_date('09/18/2011','mm/dd/yyyy'),102680,'CODDA12');

insert into invoices values(706,to\_date('11/04/2010','mm/dd/yyyy'),179138,'CODDA17');

insert into invoices values(707,to\_date('12/13/2011','mm/dd/yyyy'),270723,'CODDA18');

insert into invoices values(708,to\_date('09/15/2010','mm/dd/yyyy'),130288,'CODDA13');

insert into invoices values(709,to\_date('03/21/2010','mm/dd/yyyy'),255003,'CODDA18');

insert into invoices values(710,to\_date('04/13/2009','mm/dd/yyyy'),254837,'CODDA19');

insert into invoices values(711,to\_date('06/30/2010','mm/dd/yyyy'),284695,'CODDA19');

insert into invoices values(712,to\_date('11/20/2010','mm/dd/yyyy'),297928,'CODDA19');

# Case Statement

Create a SQL case statement that returns all table columns with one additional column that states

**Add Invoice to 2009** if the invoice date is in 2009

**Add Invoice to 2010** if the invoice date is in 2010

**Add Invoice to 2011** if the invoice date is in 2011

select inv\_date,

case

when inv\_date between '01-JAN-2009' and '31-DEC-2009' then 'Add to 2009'

when inv\_date between '01-JAN-2010' and '31-DEC-2010' then 'Add to 2010'

when inv\_date between '01-JAN-2011' and '31-DEC-2011' then 'Add to 2011'

end