# Lec 2 (lesson 4,5,6,7,9)

Notes 6 "self study"

Lesson 4

General function :

Function deals with the NULL values

NVL(a,v) 🡪 if the a is NULL return v else return a . (a,v must be the same data type)

NVL2(a,v,z) –> if a null return z else return v . (z,v must be the same data type)

NULLIF(a,b) if a&b equal return NULL else retun a. (a,b must be the same data type)

Coalesce (a,b,…..,exprn) 🡪 take number of parameter and will retun the first not NULL parameter. (all parameters must be the same data type)

Conditional expression :

Simulate the concept of the if condition in programming

Case id when value then value2 if id=value retun vlaue2 ,if id=value3 retun value4 else retrun value5

When value3 then value 4

Else value 5

End

Decode (id ,value,value2,value3,value4,value5 ) 🡪this equal to the previous case

Case can implement == => =<

Decode implement only equal

Case is slower than decode

Lesson 5

#Aggregate functions sum , avg ,min ,max ,count

#Sum &&avg doesn't act with the chars

#Count(commission) 🡪 ignore the null values in this column

#Count(distinct commission ) 🡪 count the distinct commission values only not all values .

#Avg(NVL(comm,0)) 🡪 will replace all null values with zero and get total avg of all

#Avg(comm) 🡪 will get only the avg of comm that have values only .

#Having contain condition of the group functions

#Nesting group functions : with 2condition

Group by a clause mandatory

The nest only for 2level

Lesson 6

Taking about the ANSI join

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Join type :

Equi ,non equi ,inner,outer

Equi join 🡪 the basic join we use (equal to inner join)

Nonequi join 🡪 depend on anything expect the equality join (not equal operator join using) .

Outer join 🡪 there are 3 types of outer join

Left outer join (emp,dep) 🡪 get all emp ,that have or haven't valued in dep emp=dep(+)

right outer join (emp,dep) 🡪 get all dep ,that have or haven't valued in emp emp(+)=dep

full outer join (emp,dep) 🡪 get all dep and all emp that have o haven’t values "there's not full outer join in the oracle" emp(+)=dep(+) 🡪 error

self join 🡪 used if I use the same table as fk & pk

emp e ,emp m where m.id=e.mgid 🡪show all employees and there managers

outer join

where emp full outer join dep

on emp .depid =dep.id

lesson 7 subquery

types of subquery:

1. single row subquery
2. multi-row subquery

in 🡪 implement ( or) with only equality.

any 🡪 or with > <….

all 🡪 and with > < …..

not in 🡪 implement (and) with only equality.

Lesson 9

# Insert 🡪 no. Of column equal to no. Of values && must put column values to null if you don't need to insert values in it .

# To copy table in another table2 🡪 inset into table [colmns ] select \* from table 2 /\*No of columns of two tables must be equal in numbers and data types \*/

# Truncate table table-name

# Truncate performance better than delete

# Truncate ( fetch table as one block) , hasn't roll back , release the memory ,can't contain where condition , ddl

# Delete ( fetch row by row from table ), has roll back , not release the physical memory that carry data until you told commit in this time it will release the memory , may be contain where condition ,dml

Data base Transactions :

#