<http://iupload:8080/iupload>

Steps

Project name \ resources folder \ Jdbc.properties file

Create a new dao implementation class (from where data has to be converted in table form)

Copy ojdbc6.jar into the project and set the classpath (build path)

Create resources folder at project level and jdbc .properties file (properties file will have driver ,url ,password)

Create an interface, QueryMapper ( contain the insert query cmd in java )

connection = JdbcUtil.getConnection();

//this method will read from properties file and store the key value

//into properties object in the java program

//Properties class ; java.util

properties.load(inputStream);

//DriverManager class ; java.sql

Connection con = DriverManager.getConnection(url, username, password);

statement.executeUpdate(); //simulates the semicolon and enter action

Sample syntax to create table

CREATE TABLE Patient(patient\_id NUMBER PRIMARY KEY,

patient\_name VARCHAR2(20),age NUMBER(3),

phone VARCHAR2(10), description VARCHAR2(80),

consultation\_date DATE);

code to describe patient table

SQL> desc patient // above syntax is displayed in table format.

Name Null? Type

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PATIENT\_ID NOT NULL NUMBER

PATIENT\_NAME VARCHAR2(20)

AGE NUMBER(3)

PHONE VARCHAR2(10)

DESCRIPTION VARCHAR2(80)

CONSULTATION\_DATE DATE

Modify table syntax

Insert into patient values(124,’patient 2’,13,9898989898,’unwell’,sysdate);

Insert into patient values(123,’patient 1’,33,9898989898,’unwell’,’01-mar-2019’);

All values in single quotes

Sql>select \* from patient; 🡪 display the data the described table

Sql> select patient\_name,age from patient;// only the name row

DATA ANALYSING

once data has been inserted, u may want to fetch the data and analyse it

the data can be fetched from one table or more than one

* default date format of oracle

DD-MON-YYYY

To\_date will be used only if u want to insert date value

In any other format

Syntax for the employee table (file table\_script)

Display all those employees who are not earning commission

Select \* from emp where comm is null ;

Display all empolyees who are clerks

Select \* from emp where job=’clerk’;

But within quotes, the value is case sensitive

BOTH character and date values need to be within single quotes

Display all emps working in dept 20

Select \* from emp where deptno = 20;//where clause

Display all emps working in dept 10 and 20

Select \* from emp where deptno = 10 or deptno=20;

Select \* from emp where deptno in(10,20)

Display all emps earning between 1250 and 5000

Select \* from emp where sal>=1250 and sal<=5000

Select \* from emp where sal between 1250 and 5000

Display all those employees who names begin with the letter A

Select \* from emp where ename like ‘A%’;

Display all those employees who names contain a as the second letter

Select \* from emp where ename like ‘\_A%’;

Display all those employees who names end with the letter N

Select \* from emp where ename like ‘%N’;

Select \* from emp where lower(ename) =’king’

Select \* from emp where ename =’king’; will not work

Select ename,length(ename) from emp ;

Display those names having exactly 4 letter names

Select \* from emp where length(ename)=4

Select count(\*) , count(comm),min(comm),max(comm),avg(comm) from emp ;

COUNT(\*) COUNT(COMM) MIN(COMM) MAX(COMM) AVG(COMM)

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14 4 0 1400 550

Except count(\*), all other functions ignore null values

Group by and having clause

Display the dept no and the num of employess in each dept

Select deptno,count(\*)

From emp

Group by deptno

DEPTNO COUNT(\*)

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30 6

20 5

10 3

Display all the mgrs. And the people reporting to each mgr

Select mgr,count(\*) from emp group by mgr;

Select mgr,count(\*) from emp where mgr is not null group by mgr;//group by clause

MGR COUNT(\*)

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7839 3

1

7782 1

7698 5

7902 1

7566 2

7788 1

all those employess who joined on same date

select hiredate from emp group by hiredate

the current rows don’t depict such a sitution

how to change data in the table

update emp set hiredate =sysdate; //without where clause, all rows

will get changed

update emp set hiredate =sysdate where deptno=10;

select hiredate from emp group by hiredate;

04-MAR-19 3

When did the earliest employee join ?

Select min(hiredate) from employee;

Select to\_char(hiredate,’month’) from emp ;

december

February

Select to\_char(hiredate,’dd/mm/yy’) from emp ;

february

year

yyyy

mon

month

dd/mm/yy

select \* from emp where to\_char(hiredate,’month’)=’March’

and to\_char(hiredate,’dd’)=4;\

select \* from emp where to\_char(hiredate,’month’)=’march’

and to\_char(hiredate,’dd’)=4;

select \* from emp where to\_char(hiredate,’month’) like ’%march%’

and to\_char(hiredate,’dd’)=4;

QL> select to\_char(hiredate,’month’),length(to\_char(hiredate,'month')) from emp;

TO\_CHAR(HIREDATE,'MONTH') LENGTH(TO\_CHAR(HIREDATE,'MONTH'))

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december 9

february 9

february 9

april 9

september 9

may 9

march 9

december 9

march 9

september 9

january 9

TO\_CHAR(HIREDATE,'MONTH') LENGTH(TO\_CHAR(HIREDATE,'MONTH'))

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Did u find out answer to when did the earliest emp join ?

But what about the emp name ?

Imp concept…

Select ename,min(hiredate) from emp;

Select ename from emp; many rows

Select min(hriedate) from emp; -one

Select ename,min(hiredate) from emp

\*

ERROR at line 1:

ORA-00937: not a single-group group function

SUBQUERY

Select ename from emp where hiredate = (Select min(hiredate) from emp)

JOINS

ANALYSE DATA find values common or uncommon and relate acc to use the following join.

Fetching data from more than one table

Foreign key : When two tables are related to each others

Emp; department\_master

Q] Does the common column between two tables need to have the same name ?

A]column name need not be the same ,values have to be the same

Display emp name and department name

Select ename,dept\_name

From emp,department\_master;

Cross join : occurs when the join condition is not given or is wrong

Multiplication of rows of 1 table\* rows of second table

Equi join/natural join

ROWS SHOIULD BE PRESENT IN BOTH TABLE

if no common values found in the rows ,it wont be in the output

syntax🡪

Select deptno,ename,dept\_name

From emp,department\_master

Where emp.deptno =Department\_master.dept\_code;

Outer join : output of equi join plus extra rows from either table

Select deptno,ename,dept\_name

From emp,department\_master

Where emp.deptno =Department\_master.dept\_code(+);

Above query will give extra rwos from emp table

Select deptno,ename,dept\_name

From emp,department\_master

Where emp.deptno (+)=Department\_master.dept\_code;

Above query will give extra rwos from dept table

Non equijoin :

Based on more than 1 table with no common column values

SQL> create table salgrade(minsal number,maxsal number,grade char(1));

Table created.

SQL> insert into salgrade values(200,500,'E');

SQL> insert into salgrade values(501,700,'D');

SQL> insert into salgrade values(701,900,'C');

MINSAL MAXSAL G

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200 500 E

501 700 D

701 900 C

701 900 C

901 1200 B

1201 1500 A

Select ename,sal,grade

From emp,salgrade

Where sal >minsal and sal<maxsal;

Self join

Display emp name and the person he reports to.

The emp table will be logically divided into two parts

One part will contain all employees; second part will contain only mgr info

Select e1.empno,e1.ename,e1.mgr,e2.empno,e2.ename

From emp e1,emp e2

Where e1.mgr = e2.empno ;

EMPNO ENAME MGR EMPNO ENAME

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7902 FORD 7566 7566 JONES

7788 SCOTT 7566 7566 JONES

7900 JAMES 7698 7698 BLAKE

7844 TURNER 7698 7698 BLAKE

Display emp name,dept name ,sal and his grade : try out

product\_id NUMBER(4) REFERENCES product(product\_id),

refernecews : foreign key

emp and department\_master

can the deptno column of emp table contain any value ?0,60

or shld it contain values only from dept\_code column of department\_master?

Can deptno of emp table column have null values ?

select deptno,ename from emp where deptno is null;

DEPTNO ENAME

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testing

insert into emp(empno,ename,deptno) values(111,'testing',70);

constraints like not null, primary key,foreign key can be given at the time of

table creation or later on also

alter table emp modify deptno references department\_master(dept\_code);

SQL> alter table emp modify deptno references department\_master(dept\_code);

Table altered.

Between every two tables; one join condition is required

Retrieve productId and name of the product’s ordered by ‘Rohini’

CREATE TABLE Employee

(

EmployeeID INT NOT NULL PRIMARY KEY,

SSN\_No INT,

Title NVARCHAR(100) NOT NULL,

FirstName NVARCHAR(100) NOT NULL,

LastName NVARCHAR(100) NOT NULL,

Age INT NOT NULL

)

PRIMARY KEY(ENSURE DUPLICATE VALUE DONT GET ADDED MAKE THEM PRIMARY KEY)

You need to ensure that the values in column SSN\_No should not have any duplicates.

The column can have one null value.

Which type of constraint would you create on SSN\_No column?

testing 111

111

Delete emp where ename is null and empno = 111;

Update emp set empno=112 where empno=111 and ename is null;

The Organization database contains table named Employee with following fields

(EmpNo, Job, Salary, MgrNo, DeptNo)

Which of the following statement will list the highest salary paid for each job?

Do the above for emp table