***Asymmetric fragmentation & replicate***

import java.sql.\*;

import java.util.\*;

class Asymmetric

{

public static void main(String args[])

{

Scanner sc= new Scanner(System.in);

int j;

System.out.println("Enter table name :");

String tname = sc.nextLine();

System.out.println("Enter Age range:");

int c1 =sc.nextInt();

int c2 =sc.nextInt();

try

{

Class.forName("oracle.jdbc.driver.OracleDriver");

Connection con=DriverManager.getConnection("jdbc:oracle:thin:@DESKTOP-8KR21VC:1521:sqlplus","scott","finalbtech8");

Statement stmt=con.createStatement();

ResultSet r = stmt.executeQuery("drop table asym1");

ResultSet rs = stmt.executeQuery("create table asym1 as select \* from "+tname+" where Age <"+c1);

ResultSet res = stmt.executeQuery("select \* from asym1");

System.out.println("\n\*\*\* STEP1 Result - Patitioning of relation r \*\*\*\n");

System.out.println("Records at r0:\n");

while(res.next())

{

System.out.println(res.getInt(1)+" "+res.getString(2)+" "+res.getInt(3)+" "+res.getString(4)+" "+res.getString(5)+" "+res.getString(6)+" "+res.getInt(7)+" "+res.getInt(8));

}

con.commit();

ResultSet r1=stmt.executeQuery("drop table asym2");

ResultSet rs1=stmt.executeQuery("create table asym2 as select \* from "+tname+" where Age >= "+c1+" and Age < "+c2);

ResultSet res1=stmt.executeQuery("select \* from asym2");

System.out.println("\nRecords at r1:\n");

while(res1.next())

{

System.out.println(res1.getInt(1)+" "+res1.getString(2)+" "+res1.getInt(3)+" "+res1.getString(4)+" "+res1.getString(5)+" "+res1.getString(6)+" "+res1.getInt(7)+" "+res1.getInt(8));

}

con.commit();

ResultSet r2=stmt.executeQuery("drop table asym3");

ResultSet rs2=stmt.executeQuery("create table asym3 as select \* from "+tname+" where Age >="+c2);

ResultSet res2=stmt.executeQuery("select \* from asym3");

System.out.println("\nRecords at r2:\n");

while(res2.next())

{

System.out.println(res2.getInt(1)+" "+res2.getString(2)+" "+res2.getInt(3)+" "+res2.getString(4)+" "+res2.getString(5)+" "+res2.getString(6)+" "+res2.getInt(7)+" "+res2.getInt(8));

}

con.commit();

ResultSet r3=stmt.executeQuery("drop table js1");

System.out.println("\n\*\*\* STEP2 Result - Join with relation doc \*\*\*\n");

ResultSet jr =stmt.executeQuery("create table js1 as select a.id,a.name,a.age,a.gender,a.email,a.password,a.height,a.weight,d.docid,d.docname,d.city,d.docmail,d.mnumber from asym1 a,Doc d where a.id = d.userid");

ResultSet rj =stmt.executeQuery("select \* from js1");

System.out.println("\nRecords at r0:\n");

while(rj.next())

{

System.out.println(rj.getInt("id")+" "+rj.getString("name")+" "+rj.getInt("age")+" "+rj.getString("gender")+" "+rj.getString("email")+" "+rj.getString("password")+" "+rj.getInt("Height")+" "+rj.getInt("weight")+" "+rj.getInt("Docid")+" "+rj.getString("docname")+" "+rj.getString("City")+" "+rj.getString("docmail")+" "+rj.getString("mnumber"));

}

con.commit();

ResultSet r4=stmt.executeQuery("drop table js2");

ResultSet jr1 =stmt.executeQuery("create table js2 as select a.id,a.name,a.age,a.gender,a.email,a.password,a.height,a.weight,d.docid,d.docname,d.city,d.docmail,d.mnumber from asym2 a,Doc d where a.id = d.userid");

ResultSet rj1 =stmt.executeQuery("select \* from js2");

System.out.println("\nRecords at r1:\n");

while(rj1.next())

{

System.out.println(rj1.getInt("id")+" "+rj1.getString("name")+" "+rj1.getInt("age")+" "+rj1.getString("gender")+" "+rj1.getString("email")+" "+rj1.getString("password")+" "+rj1.getInt("Height")+" "+rj1.getInt("weight")+" "+rj1.getInt("Docid")+" "+rj1.getString("docname")+" "+rj1.getString("City")+" "+rj1.getString("docmail")+" "+rj1.getString("mnumber"));

}

con.commit();

ResultSet r5=stmt.executeQuery("drop table js3");

ResultSet jr2 =stmt.executeQuery("create table js3 as select a.id,a.name,a.age,a.gender,a.email,a.password,a.height,a.weight,d.docid,d.docname,d.city,d.docmail,d.mnumber from asym3 a,Doc d where a.id = d.userid");

ResultSet rj2 =stmt.executeQuery("select \* from js3");

System.out.println("\nRecords at r2:\n");

while(rj2.next())

{

System.out.println(rj2.getInt("id")+" "+rj2.getString("name")+" "+rj2.getInt("age")+" "+rj2.getString("gender")+" "+rj2.getString("email")+" "+rj2.getString("password")+" "+rj2.getInt("Height")+" "+rj2.getInt("weight")+" "+rj2.getInt("Docid")+" "+rj2.getString("docname")+" "+rj2.getString("City")+" "+rj2.getString("docmail")+" "+rj2.getString("mnumber"));

}

con.commit();

System.out.println("\n\*\*\* Final Result - Merge both the relations \*\*\*\n");

ResultSet r6=stmt.executeQuery("drop table atemp1");

ResultSet jr3 =stmt.executeQuery("create table atemp1 as select \* from js1 union all select \* from js2 union all select \* from js3");

ResultSet rj3 =stmt.executeQuery("select \* from atemp1");

while(rj3.next())

{

System.out.println(rj3.getInt("id")+" "+rj3.getString("name")+" "+rj3.getInt("age")+" "+rj3.getString("gender")+" "+rj3.getString("email")+" "+rj3.getString("password")+" "+rj3.getInt("Height")+" "+rj3.getInt("weight")+" "+rj3.getInt("Docid")+" "+rj3.getString("docname")+" "+rj3.getString("City")+" "+rj3.getString("docmail")+" "+rj3.getString("mnumber"));

}

con.commit();

}

catch(Exception e){ System.out.println(e);}

}

}

***Output:***



