Source code

import java.sql.\*;

import java.util.\*;

public class App {

static Scanner in = new Scanner(System.in);

static exe ex = new exe();

public static void main(String[] args) {

int repeat=1, choice;

System.out.println("1.Create table");

System.out.println("2.Create Simple view");

System.out.println("3.Create Simple index");

System.out.println("4.Create sequence");

System.out.println("5.Create synonym");

System.out.println("6.exit");

System.out.println("7.Create Complex view");

System.out.println("8.Create Compound index");

System.out.println("9.Create Unique index");

ex.reset();

while(repeat==1){

System.out.print("Enter option : ");

choice = Integer.parseInt(in.nextLine());

switch (choice) {

case 1:

ex.create\_table();

break;

case 2:

ex.create\_view();

break;

case 3:

ex.create\_index();

break;

case 4:

ex.create\_seq();

break;

case 5:

ex.create\_synonym();

break;

case 7:

ex.create\_complex\_view();

break;

case 8:

ex.create\_compound\_index();

break;

case 9:

ex.create\_unique\_index();

break;

default:

break;

}

System.out.println("Again? (1/0) : ");

repeat = Integer.parseInt(in.nextLine());

}

}

}

import java.sql.\*;

public class exe {

void create\_table(){

try{

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate("drop table if exists sample");

stmt.executeUpdate("create table sample (id int not null,value varchar(20))");

ResultSet r = stmt.executeQuery("select \* from sample");

while(r.next()) {

System.out.println(r.getInt(1) + "\t" + r.getString(2));

}

con.close();

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

}

void create\_view(){

try{

String stmnt = "create or replace view comp as select fname, lname from professor where dept\_id=1";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate(stmnt);

ResultSet r = stmt.executeQuery("select \* from comp");

while(r.next()) {

System.out.println(r.getString(1) + "\t" + r.getString(2));

}

con.close();

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

}

void create\_index(){

try{

String stmnt = "CREATE INDEX ind\_1 ON professor(fname)";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate(stmnt);

ResultSet r = stmt.executeQuery("show index from professor");

while(r.next()){

System.out.println(r.getString(3) + "\t" + r.getString(5));

}

con.close();

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

}

void create\_seq(){

try{

String stmnt = "CREATE TABLE employees (emp\_no INT AUTO\_INCREMENT PRIMARY KEY,f\_name VARCHAR(50),l\_name VARCHAR(50));";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate(stmnt);

con.close();

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

}

// write in writeups[ only avaliable in oracle not mysql ]

void create\_synonym(){

try{

String stmnt = "CREATE TABLE employees (emp\_no INT AUTO\_INCREMENT PRIMARY KEY,f\_name VARCHAR(50),l\_name VARCHAR(50));";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate("drop table if exists employees");

stmt.executeUpdate(stmnt);

con.close();

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

}

void create\_complex\_view(){

try{

String stmnt = "create or replace view comp as select p.fname, p.lname from professor p, department d where p.dept\_id=d.dept\_id";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate(stmnt);

ResultSet r = stmt.executeQuery("select \* from comp");

while(r.next()) {

System.out.println(r.getString(1) + "\t\t\t" + r.getString(2));

}

con.close();

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

}

void create\_compound\_index(){

try{

String stmnt = "CREATE INDEX ind\_2 ON professor(fname, lname)";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate(stmnt);

ResultSet r = stmt.executeQuery("show index from professor");

while(r.next()){

System.out.println(r.getString(3) + "\t" + r.getString(5));

}

con.close();

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

}

void create\_unique\_index(){

try{

String stmnt = "CREATE unique INDEX ind\_3 ON department(dept\_id)";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate(stmnt);

ResultSet r = stmt.executeQuery("show index from department");

while(r.next()){

System.out.println(r.getString(3) + "\t" + r.getString(5));

}

con.close();

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

}

void reset(){

try{

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/A1\_professor\_schema","root","Hello@123");

Statement stmt = con.createStatement();

stmt.executeUpdate("drop table if exists employees");

stmt.executeUpdate("drop index ind\_1 on professor");

stmt.executeUpdate("drop index ind\_2 on professor");

stmt.executeUpdate("drop index ind\_3 on department");

stmt.executeUpdate("DROP VIEW IF EXISTS comp");

stmt.executeUpdate("drop table if exists sample");

con.close();

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

}

}