**ResultSetDemo**:

package p2;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.Statement;

import java.util.Scanner;

public class ResultSetDemo {

public static void main(String[] args)throws Exception{

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

Connection con = DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe", "system", "manager");

Statement st = con.createStatement(ResultSet.TYPE\_SCROLL\_SENSITIVE, ResultSet.CONCUR\_UPDATABLE);

ResultSet rs = st.executeQuery("select \* from students order by rno");

Scanner sc = new Scanner(System.in);

while(true){

System.out.print("Select an option:\n\t1. Forward Traverse\n\t2. ReverseTraverse\n\t3. Absolute Record\n\t4. First Record\n\t5. Last Record\n\t6. Exit\nEnter your choice: ");

int choice = sc.nextInt();

switch(choice){

case 1:

forwardTraverse(rs);

break;

case 2:

reverseTraverse(rs);

break;

case 3:

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

int position = sc.nextInt();

if(rs.absolute(position)){

printRecord(rs);

}else{

System.out.println("Row "+position+" is not found");

}

break;

case 4:

if(rs.first()){

printRecord(rs);

}else{

System.out.println("No Record Found");

}

break;

case 5:

if(rs.last()){

printRecord(rs);

}else{

System.out.println("No Record Found");

}

break;

case 6:

System.exit(0);

}

}

}

static void forwardTraverse(ResultSet rs)throws Exception{

rs.beforeFirst();

while(rs.next()){

printRecord(rs);

}

}

static void reverseTraverse(ResultSet rs)throws Exception{

rs.afterLast();

while(rs.previous()){

printRecord(rs);

}

}

static void printRecord(ResultSet rs)throws Exception{

System.out.println(rs.getInt(1)+"\t"+rs.getString(2)+"\t"+rs.getString(3)+"\t"+rs.getInt(4));

}

}

**Meta Data in JDBC:**

* JDBC provide 2 types of meta data
* 1) database meta data
* 2) result set meta data

**“execute()” method / TCL Commands / MetaData**:

package p2;

import java.sql.Connection;

import java.sql.DatabaseMetaData;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.ResultSetMetaData;

import java.sql.Statement;

import java.util.Scanner;

public class ExecuteDemo {

public static void main(String[] args) throws Exception{

Scanner sc = new Scanner(System.in);

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

Connection con = DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe", "system", "manager");

Statement st = con.createStatement();

con.setAutoCommit(false);

DatabaseMetaData dbmd = con.getMetaData();

System.out.println("Database Name: "+dbmd.getDatabaseProductName());

System.out.println("Database Version: "+dbmd.getDatabaseProductVersion());

String q;

int count, colCount;

ResultSet rs;

ResultSetMetaData rsmd;

boolean b;

while(true){

try{

System.out.print("SQL> ");

q = sc.nextLine();

if(q.equalsIgnoreCase("exit")){

break;

}else if(q.equalsIgnoreCase("commit")){

con.commit();

System.out.println("Commit Completed");

continue;

}else if(q.equalsIgnoreCase("rollback")){

con.rollback();

System.out.println("Rollback completed");

continue;

}

b = st.execute(q);

if(b){

rs = st.getResultSet();

rsmd = rs.getMetaData();

colCount = rsmd.getColumnCount();

for(int i=1;i<=colCount;i++){

System.out.print(rsmd.getColumnName(i)+"\t");

}

System.out.println("\n--------------------------------------------");

while(rs.next()){

for(int i=1;i<=colCount;i++){

System.out.print(rs.getString(i)+"\t");

}

System.out.println();

}

}else{

count = st.getUpdateCount();

System.out.println(count+" row(s) effected");

}

}catch(Exception ex){

System.out.println("Exeption Occured: "+ex.getMessage());

}

}

con.close();

}

}