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Dt: 10/3/2025
define "type"?
=>"type" specifies the direction of Cursor on ResultSet Object.
=>The following fields from ResultSet-Interface will specify the "type"
   public static final int TYPE_FORWARD_ONLY;
   public static final int TYPE_SCROLL_INSENSITIVE;
   public static final int TYPE_SCROLL_SENSITIVE;
define "mode"?
=>"mode" specifies the action to be performed on ResultSet Object.
=>The following fields from ResultSet-Interface will specify the "mode":
  public static final int CONCUR_READ_ONLY;
  public static final int CONCUR_UPDATABLE;
Note:
=>we use the following some important methods to control cursor on ResultSet Object:
   1.afterLast()
   2.beforeFirst()
   3.first()
   4.last()
   5.previous()
   6.next()
   7.absolute(int)
   8.relative(int)
```

1.afterLast():
=>afterLast()-method will make the cursor point after the last row in ResultSet Object.
2.beforeFirst():
=>beforeFisrt()-method will make the cursor point before the first row in ResultSet Object.
3.first():
=>first()-method will make the cursor point to the first row of ResultSet Object.
4.last():
=>last()-method will make the cursor point to the last row of ResultSet Object.
5.previous():
=>previous()-method is used to move the cursor in backward direction.
6.next():
=>next()-method is used to move the cursor in forward direction.
7.absolute(int):
=>absolute(int)-method is used to move the cursor to specified row number.
8.relative(int):
=>relative(int)-method is used to take incre/decre value as parameter and move the
cursor in forward or backward direction from current cursor position.

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Program: DBCon8.java
package test;
import java.sql.*;
public class DBCon8 {
     public static void main(String[] args) {
           Class.forName("oracle.jdbc.driver.OracleDriver");
           Connection con = DriverManager.getConnection
      ("jdbc:oracle:thin:@localhost:1521:xe", "system", "tiger");
           System.out.println("******Statement*****");
           Statement stm = con.createStatement
                       (ResultSet.TYPE SCROLL INSENSITIVE,
                                   ResultSet.CONCUR READ ONLY);
           ResultSet rs1 = stm.executeQuery("select * from Customer72");
           System.out.println("-----");
           rs1.absolute(3);
           System.out.println(rs1.getLong(1)+"\t"
                       +rs1.getString(2)+"\t"
                       +rs1.getString(3)+"\t"
                       +rs1.getString(4)+"\t"
                       +rs1.getString(5));
           System.out.println("-----");
           rs1.relative(-2);
           System.out.println(rs1.getLong(1)+"\t"
                       +rs1.getString(2)+"\t"
                       +rs1.getString(3)+"\t"
                       +rs1.getString(4)+"\t"
                       +rs1.getString(5));
           System.out.println("-----last row-----");
           rs1.last();
           System.out.println(rs1.getLong(1)+"\t"
                       +rs1.getString(2)+"\t"
                       +rs1.getString(3)+"\t"
                       +rs1.getString(4)+"\t"
                       +rs1.getString(5));
           System.out.println("-----first row-----");
           rs1.first();
           System.out.println(rs1.getLong(1)+"\t"
                       +rs1.getString(2)+"\t"
                       +rs1.getString(3)+"\t"
                       +rs1.getString(4)+"\t"
                       +rs1.getString(5));
           System.out.println("*****PreparedStatement*****");
           PreparedStatement ps = con.prepareStatement(
                       "select * from BankCustomer72",
                       ResultSet.TYPE_SCROLL_INSENSITIVE,
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ResultSet.CONCUR READ ONLY);
            ResultSet rs2 = ps.executeQuery();
            System.out.println("-----");
            rs2.afterLast();
            while(rs2.previous()) {
                   System.out.println(rs2.getLong(1)+"\t"
                                +rs2.getString(2)+"\t"
                                +rs2.getString(3)+"\t"
                                +rs2.getString(4)+"\t"
                                +rs2.getString(5));
            }//end of Loop
         }catch(Exception e) {
             e.printStackTrace();
      }
}
o/p:
******Statement*****
----3rd row-----
4545451234
            HM4545451234
                                RTER Hyd
                                            r@gmail.com
----relative(-2)-----
9898981234
            HM9898981234
                                Alex
                                             al@gmail.com
                                      Sec
-----last row-----
            HM4545451234
                                RTER
                                             r@gmail.com
4545451234
                                      Hyd
-----first row-----
            HM9898981234
                                             al@gmail.com
9898981234
                                Alex
                                      Sec
*****PreparedStatement*****
----reverse----
321321 SB321321
                         10000 Savings
                   Raj
6123456
            SB6123456
                                12000 Savings
                         Alex
```