```
import com.ram.bean.StudentBean;
import java.util.ArrayList;
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* and open the template in the editor.
*/
* @author Admin
public class A2 {
  public static void main(String[] args) {
    ArrayList<Integer> list=new ArrayList<Integer>();
    list.add(10);
    list.add(100);
    list.add(20);
    list.add(200);
    System.out.println(list);
    System.out.println("Print Data Using for each ");
    for(Integer x:list){
      System.out.println(""+x);
    }
    ArrayList<StudentBean> list2=new ArrayList<StudentBean>();
    list2.add(new StudentBean(101, "A", "X1", 0, 0, 0, 0, 0, 0, 0));
    list2.add(new StudentBean(102, "B", "X1", 0, 0, 0, 0, 0, 0, 0));
    list2.add(new StudentBean(103, "C", "X1", 0, 0, 0, 0, 0, 0, 0));
    list2.add(new StudentBean(104, "D", "X1", 0, 0, 0, 0, 0, 0, 0));
    list2.add(new StudentBean(105, "E", "X1", 0, 0, 0, 0, 0, 0, 0));
    System.out.println("Print All Data from list 2");
    for(StudentBean sb:list2){
      System.out.println(""+sb.getSid()+"\t"+sb.getName());
    }
  }
}
import java.sql.*;
class StudentDAO{
         static Connection conn;
  public ArrayList<StudentBean> findAll(){
    //step1:
    //step2:
    conn=ConnectionPool.connectDB();
    ArrayList<StudentBean> list=new ArrayList<StudentBean>();
    //step3: Write SQL Query select
    String sql="select * from student";
   try {
     //step4: Create an Object of Statement
     Statement stmt=conn.createStatement();
```

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//step5: Call executeQuery method
            ResultSet rs=stmt.executeQuery(sql);
            //step6: Extract data from the ResultSet and add into ArrayList
            while(rs.next()){
                 StudentBean x=new StudentBean();
                 //step1: Fetch data from resultSet and Set Into the Bean
                 x.setSid(rs.getInt("sid"));
                 x.setName(rs.getString("name"));
                 x.setEnroll(rs.getString("enroll"));
                 x.setP(rs.getInt("p"));
                 x.setC(rs.getInt("c"));
                 x.setM(rs.getInt("m"));
                 x.setH(rs.getInt("h"));
                 x.setE(rs.getInt("e"));
                 x.setTotal(rs.getInt("total"));
                 x.setPer(rs.getFloat("per"));
                 //step2: add bean object into list
                 list.add(x);
            //step7: Close the Connection
           conn.close();
       } catch (SQLException ex) {
            Logger.getLogger(StudentDAO.class.getName()).log(Level.SEVERE, null, ex);
       }
         return list;
    }
     public static void main(String[] args) {
         //4. call findAll Method
StudentDAO sd=new StudentDAO();
ArrayList<StudentBean> al=sd.findAll();
for(StudentBean s:al){
System.out.println("\t"+s.getSid()+"\t"+s.getName()+"\t"+s.getEnroll()+"\t"+s.getP()+"\t"+s.getC()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.getSid()+"\t"+s.ge
"+s.getM()+"\t"+s.getH()+"\t"+s.getE()+"\t"+s.getTotal()+"\t"+s.getPer());
}
/*
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 */
package com.ram.dao;
import com.ram.bean.StudentBean;
import com.ram.utility.ConnectionPool;
import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.ArrayList;
import java.util.logging.Level;
import java.util.logging.Logger;
public class StudentDAO {
  static Connection conn;
```

```
public int addStudent(StudentBean sb){
    //step1
    //step2
    conn=ConnectionPool.connectDB();
    //step3: Write SQL Query
    int total=sb.getP()+sb.getC()+sb.getM()+sb.getH()+sb.getE();
    float per=total/5.0f;
    String sql="insert into student
values(""+sb.getSid()+"",""+sb.getName()+"",""+sb.getEnroll()+"",""+sb.getP()+"",""+sb.getC()+"",""+sb.get
M()+"',""+sb.getH()+"',""+sb.getE()+"',""+total+"',""+per+"')";
    int r=0;
   try {
     //step4: Create Object of Statement
     Statement stmt=conn.createStatement();
     //step5: call executeUpdate()
     r=stmt.executeUpdate(sql);
     //step6: Close the Connection
     conn.close();
   } catch (SQLException ex) {
     Logger.getLogger(StudentDAO.class.getName()).log(Level.SEVERE, null, ex);
   }
    return r;
  }
  public int updateStudent(StudentBean sb){
    //step1
    //step2
    conn=ConnectionPool.connectDB();
    //step3: Write SQL Query
    int total=sb.getP()+sb.getC()+sb.getM()+sb.getH()+sb.getE();
    float per=total/5.0f;
    String sql="update student set
name=""+sb.getName()+"",enroll=""+sb.getEnroll()+"",p=""+sb.getP()+"",c=""+sb.getC()+"",
m='"+sb.getM()+"',h='"+sb.getH()+"',e='"+sb.getE()+"',total='"+total+"',per='"+per+"' where
sid=""+sb.getSid()+""";
    int r=0;
   try {
     //step4: Create Object of Statement
     Statement stmt=conn.createStatement();
     //step5: call executeUpdate()
     r=stmt.executeUpdate(sql);
     //step6: Close the Connection
     conn.close();
   } catch (SQLException ex) {
     Logger.getLogger(StudentDAO.class.getName()).log(Level.SEVERE, null, ex);
   }
    return r;
  }
  public int deleteStudent(int sid){
    //step1:
    //step2:
    conn=ConnectionPool.connectDB();
    int r=0;
    //step3: Write SQL Query
    String sql="delete from student where sid="+sid+"";
```

```
try {
     //step4: Create Object of Statement
     Statement stmt=conn.createStatement();
     //step5: call executeUpdate()
     r=stmt.executeUpdate(sql);
     //step6: Close the Connection
     conn.close();
   } catch (SQLException ex) {
     Logger.getLogger(StudentDAO.class.getName()).log(Level.SEVERE, null, ex);
   }
    return r;
  }
  public ArrayList<StudentBean> findAll(){
    //step1:
    //step2:
    conn=ConnectionPool.connectDB();
    ArrayList<StudentBean> list=new ArrayList<StudentBean>();
    //step3: Write SQL Query select
    String sql="select * from student";
   try {
     //step4: Create an Object of Statement
     Statement stmt=conn.createStatement();
     //step5: Call executeQuery method
     ResultSet rs=stmt.executeQuery(sql);
     //step6: Extract data from the ResultSet and add into ArrayList
     while(rs.next()){
       StudentBean x=new StudentBean();
       //step1: Fetch data from resultSet and Set Into the Bean
       x.setSid(rs.getInt("sid"));
       x.setName(rs.getString("name"));
       x.setEnroll(rs.getString("enroll"));
       x.setP(rs.getInt("p"));
       x.setC(rs.getInt("c"));
       x.setM(rs.getInt("m"));
       x.setH(rs.getInt("h"));
       x.setE(rs.getInt("e"));
       x.setTotal(rs.getInt("total"));
       x.setPer(rs.getFloat("per"));
       //step2: add bean object into list
       list.add(x);
     //step7: Close the Connection
     conn.close();
   } catch (SQLException ex) {
     Logger.getLogger(StudentDAO.class.getName()).log(Level.SEVERE, null, ex);
   }
    return list;
  public static void main(String[] args) {
    //4. call findAll Method
StudentDAO sd=new StudentDAO();
ArrayList<StudentBean> al=sd.findAll();
for(StudentBean s:al){
```

```
System.out.println("\t"+s.getSid()+"\t"+s.getName()+"\t"+s.getEnroll()+"\t"+s.getP()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()+"\t"+s.getC()
 "+s.getM()+"\t"+s.getH()+"\t"+s.getE()+"\t"+s.getTotal()+"\t"+s.getPer());
//
                      StudentBean sb=new StudentBean();
                      sb.setC(67);
//
//
                      sb.setE(78);
                      sb.setEnroll("011Cs1");
//
//
                      sb.setH(67);
//
                      sb.setM(66);
//
                      sb.setP(55);
                      sb.setName("XXXXX");
//
                      sb.setSid(105);
//
                      StudentDAO sd=new StudentDAO();
//
                      int result=sd.addStudent(sb);
//
//
                      if(result>0){
//
                             System.out.println("Student Added Success");
//
                      }else{
                             System.out.println("Student Not Added");
//
//
                      }
////3. Call deletestudent()
//StudentDAO sd=new StudentDAO();
//int x=sd.deleteStudent(101);
//if(x>0){
// System.out.println("Data Deletion success");
//}else{
// System.out.println("Data Deletion Fail");
//}
      }
}
```