学习情况表

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（请在下面表格本周学习情况）

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| 学习情况简述 |
| 学习了数据结构-排序  并学习了Java的Arraylist  练习了相应代码 |
| 本周练习过的代码 |
| 代码一：数组  package com.array;  public class Array {  private int[] data;  private int size;   public int getSize() {  return size;  }   public Array(int capacity) {  data = new int[capacity];  size = 0;  }   public Array() {  this(10);  }   public int getCapacity() {  return data.length;  }   public boolean isEmpty() {  return size == 0;  }   public void addLast(int e) {  insertArray(e, size);  }   public void addFirst(int e) {  insertArray(e, 0);  }   public void insertArray(int e, int loc) {  if (size == data.length) {  throw new IllegalArgumentException("Insert failed. Array is full");  }  if (loc < 0 || loc > size) {  throw new IllegalArgumentException("Insert failed. Require loc >= 0 and loc <= size");  }  for (int i = size; i > loc; i--) {  data[i] = data[i - 1];  }  data[loc] = e;  size++;  }   int get(int loc) {  if (loc < 0 || loc > size) {  throw new IllegalArgumentException("Insert failed. Require loc >= 0 and loc <= size");  }  return data[loc];  }  public boolean contains( int e){  for (int i= 0; i < size ; i++) {  if(data[i] == e){  return true;  }  }  return false;  }  public int find (int e){  for (int i = 0; i < size; i++) {  if(data[i] == e){  return i;  }  }  return -1;  }  public int Delete( int index){  if(index < 0 || index >= size){  throw new IllegalArgumentException("Delete failed.Require index >= 0 and index < size");  }  int n = data[index];  for (int i = index+1; i < size; i++) {  data[i-1]=data[i];  }  size --;  return n;  }  public int DeleteFirst(){  return Delete(0);  }  public int DelteLast(){  return Delete(size-1);  }  public void DeleteElement(int e){  int index = find(e);  if ( index != -1){  Delete(index);  }  }  @Override  public String toString() {  StringBuilder s = new StringBuilder();  s.append(String.*format*("Array: size = %d, capacity = %d\n", size, data.length));  s.append('[');  for (int i = 0; i < size; i++) {  s.append(data[i]);  if (i != size - 1) {  s.append(',');  }  }  s.append(']');  return s.toString();  } }  package com.array;  public class Main {  public static void main(String[] args) {  Array arr = new Array(20);  for (int i = 0; i < 10; i++) {  arr.addLast(i);  }  arr.insertArray(100,1);  arr.addFirst(-1);  arr.Delete(2);  arr.DeleteElement(9);  arr.DeleteFirst();  System.*out*.println(arr);  } } |
| 代码二：插入排序，选择排序  package sort;  import java.util.Scanner;  public class sort\_demo {  public static void main(String[] args) {  Scanner sc = new Scanner(System.*in*);  String[] ch = null;  System.*out*.println("请输入数组（用空格隔开，结束时输入回车）");  ch = sc.nextLine().split(" ");  int[] a = new int[ch.length];  for (int i = 0; i < a.length; i++) {  a[i] = Integer.*valueOf*(ch[i]);  }   *xuanzesort*(a);  System.*out*.println();  *charupaixu*(a);   }   public static void charupaixu(int[] a) {  for (int i = 1; i < a.length; i++) {  for (int j = i; j >= 1; j--) {  if (a[j] <= a[j - 1]) {  int t = a[j];  a[j] = a[j - 1];  a[j - 1] = t;  } else break;   }   }  *print*(a);  }   public static void xuanzesort(int[] a) {  for (int j = 0; j < a.length - 1; j++) {  int t = j;  for (int i = j; i < a.length; i++) {  if (a[i] < a[t]) {  t = i;  }  }  int m = a[j];  a[j] = a[t];  a[t] = m;  }  *print*(a);   }   public static void print(int a[]) {  for (int i = 0; i < a.length; i++) {  System.*out*.print(a[i] + "\t");  }  } } |
| 代码三：  package test;  public class student {  private int num;  private String CLASS;  private String name;  private int age;   public student() {  }   public student(int num, String CLASS, String name, int age) {  this.num = num;  this.CLASS = CLASS;  this.name = name;  this.age = age;  }   public int getNum() {  return num;  }   public void setNum(int num) {  this.num = num;  }   public String getName() {  return name;  }   public void setName(String name) {  this.name = name;  }   public int getAge() {  return age;  }   public void setAge(int age) {  this.age = age;  }   public String getCLASS() {  return CLASS;  }   public void setCLASS(String CLASS) {  this.CLASS = CLASS;  }  }  package test;  import java.util.ArrayList; import java.util.Scanner;  public class stu {  public static void main(String[] args) {  student m1 = new student(20180302,"一班","张三",23);  student m2 = new student(20180303,"二班","李四",23);  student m3 = new student(20180304,"三班","王二麻子",26);  student m4 = new student(20180305,"四班","金三胖",3);  ArrayList<student> Stu = new ArrayList<>();  Stu.add(m1);  Stu.add(m2);  Stu.add(m3);  Stu.add(m4);  for (int i = 0; i < Stu.size(); i++) {  System.*out*.println("学号："+Stu.get(i).getNum());  System.*out*.println("姓名："+Stu.get(i).getName());  System.*out*.println("年龄："+Stu.get(i).getAge());  System.*out*.println("班级："+Stu.get(i).getCLASS());  System.*out*.println("--------------------");  }  Scanner sc = new Scanner(System.*in*);  while (true) {  System.*out*.println("请输入查询学号");  int mark = sc.nextInt();  for (int i = 0; i < Stu.size(); i++) {   if(Stu.get(i).getNum() == mark){  System.*out*.println("学号："+Stu.get(i).getNum());  System.*out*.println("姓名："+Stu.get(i).getName());  System.*out*.println("年龄："+Stu.get(i).getAge());  System.*out*.println("班级："+Stu.get(i).getCLASS());  break;  }  }  }  } } |
| 代码四：  package grade;  import javax.swing.\*; import java.util.ArrayList;  public class array {  public static void main(String[] args) {  ArrayList<Integer> grade = new ArrayList<>();  grade.add(98);  grade.add(77);  grade.add(66);  grade.add(89);  grade.add(79);  grade.add(50);  grade.add(100);  for (int i = 0; i < grade.size(); i++) {  if ( grade.get(i) < 80){  grade.remove( i );  i--;  }  }  for (int i = 0; i < grade.size(); i++) {  System.*out*.print(grade.get(i)+" ");  }  } } |