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| **学校** | 吉林大学珠海学院 |  | **班级** | **软件7班** |  | **科目** | JAVA面向对象程序设计 |
| **学院** | 计算机学院 |  | **姓名** | 张子恒 |  | **日期** | 2023.3.27 |
| **专业** | 软件工程 |  | **学号** | 04222119 |  | **实验名称** | 实验五 |

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| **实验内容**  第1题  代码（要有必要的注释说明程序思路）  package ex05;  public class TestAddressBook {  public static void main(String[] args) {  AddressBook zhangsan\_addr = new AddressBook();  zhangsan\_addr.setName("张三");  zhangsan\_addr.setAddress("中国北京");  zhangsan\_addr.setTel("13311112222");  zhangsan\_addr.getAllInfo();  } }  class AddressBook {  String name;  String address;  String tel;   public String getName() {  return name;  }   public void setName(String name) {  this.name = name;  }   public String getAddress() {  return address;  }   public void setAddress(String address) {  this.address = address;  }   public String getTel() {  return tel;  }   public void setTel(String tel) {  this.tel = tel;  }  public void getAllInfo() {  System.*out*.println("姓名：" + getName());  System.*out*.println("地址：" + getAddress());  System.*out*.println("电话：" + getTel());  } }  运行结果截图    第2题  代码（要有必要的注释说明程序思路）  package ex05;  import java.util.Scanner;  public class TestShape {  public static void main(String[] args) {  Scanner scanner = new Scanner(System.*in*);   double areaRect,areaCircle = 0; *//面积* double longRect,longCircle = 0; *//周长   //创建矩形对象* Rect rect = new Rect();  System.*out*.println("输入矩形的长：");  rect.setLength(scanner.nextDouble());  System.*out*.println("输入矩形的宽：");  rect.setWidth(scanner.nextDouble());  areaRect = rect.getLength() \* rect.getWidth();  longRect = 2 \* (rect.getLength() + rect.getWidth());  System.*out*.println("矩形信息如下：\n" + "长：" + rect.getLength() + "宽：" + rect.getWidth()  + "面积：" + areaRect + "周长：" + longRect);   *//创建圆对象* Circle circle = new Circle();  System.*out*.println("输入圆形的半径：");  circle.setRadius(scanner.nextDouble());  areaCircle = 3.14 \* circle.getRadius() \* circle.getRadius();  longCircle = 2 \* 3.14 \* circle.getRadius();  System.*out*.println("圆形信息如下：\n" + "半径：" + circle.getRadius()  + "面积：" + areaCircle + "周长：" + longCircle);  } } class Rect {  double length;  double width;   public double getLength() {  return length;  }   public void setLength(double length) {  this.length = length;  }   public double getWidth() {  return width;  }   public void setWidth(double width) {  this.width = width;  } } class Circle {  double Radius;   public double getRadius() {  return Radius;  }   public void setRadius(double radius) {  Radius = radius;  } }  运行结果截图    第3题  代码  package ex05;  import java.util.Scanner;  public class Base {  public static void main(String[] args) {  //接收一个数  Scanner scanner = new Scanner(System.*in*);  System.*out*.println("请输入一个数：");  int num = scanner.nextInt();   //转换为二进制  int[] numEr = new int[8];  int indexEr = 0; //计数  for (int i = num; i > 0; i /= 2,indexEr++) {  numEr[indexEr] = i % 2;  }  System.*out*.println("二进制：");  for (int i = 7; i >= 0; i--) {  System.*out*.print(numEr[i]);  }   //转换为八进制  int[] numBr = new int[8];  int indexBr = 0;  for (int i = num; i > 0; i /= 8,indexBr++) {  numBr[indexBr] = i % 8;  }  System.*out*.println("\n八进制：");  for (int i = indexBr-1; i >= 0; i--) {  System.*out*.print(numBr[i]);  }   //转换为十六进制  int[] nums = new int[100];  int indexs = 0;  for (int i = num; i > 0; i /= 16,indexs++) {  nums[indexs] = i % 16;  }  System.*out*.println("\n十六进制：");  for (int i = indexs - 1; i >= 0; i--) {  if(nums[i] == 10){  System.*out*.println("A");  }else if(nums[i] == 11){  System.*out*.println("B");  }else if(nums[i] == 13){  System.*out*.println("C");  }else if(nums[i] == 14){  System.*out*.println("D");  }else if(nums[i] == 15){  System.*out*.println("E");  }else if(nums[i] == 16){  System.*out*.println("F");  }else {  System.*out*.print(nums[i]);  }  }  } }  运行结果截图    第4题  代码  package ex05;  import java.util.Scanner;  public class Prime {  public static void main(String[] args) {  Scanner scanner = new Scanner(System.*in*);  System.*out*.println("输入一个正整数：");  int num = scanner.nextInt();  boolean bool = true;  for (int i = 2; i < num; i++) {  if (num % i == 0){  bool = false;  break;  }  }  if (bool){  System.*out*.println(num + "是素数");  }else {  System.*out*.println(num + "不是素数");  }  } }  运行结果截图    第5题  代码  运行结果截图 |
| **小结** |