

实验项目 1: 编写类文件 (粘贴代码及运行结果),

```
import
com.sun.jmx.snmp.SnmpUnknownAccContrModelException
;
import java.util.Scanner;
class Student {
    private String name;
    private int age;
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public int getAge() {
        return age;
    }
    public void setAge(int age) {
        if (age > 20 && age < 30)
            this.age = age;
    }
    public void study() {
        System.out.println(name + " " + age + " " +
"study");
    }
}
class Teacher {
    private String name;
    private int age;

    public int getAge() {
        return age;
    }
}
```

```
    public void setAge(int age) {
        if (age > 30 && age < 70) {
            this.age = age;
        }
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public void teach() {
        System.out.println(name + " " + age + " " +
"teach");
    }
}
public class Test1 {
    public static void main(String[] args) {
        Student s = new Student();
        Scanner scanner = new Scanner(System.in);
        System.out.println("输入姓名: ");
        s.setName(scanner.next());
        System.out.println("输入年龄: ");
        s.setAge(scanner.nextInt());
        s.study();
        Teacher t = new Teacher();
        System.out.println("输入姓名: ");
        t.setName(scanner.next());
        System.out.println("输入年龄: ");
        t.setAge(scanner.nextInt());
        t.teach();
    }
}
```

运行结果:

输入姓名:

liu

输入年龄:

22

liu 22 study

输入姓名:

li

输入年龄:

34

li 34 teach

实验项目 2：构造函数与 this 关键字用法（粘贴代码及运行结果），

```
class Triangle{
    int bottom;
    double high;
    Triangle(double high){
        this.high=high;
    }
    Triangle(int bottom){
        this.bottom=bottom;
    }
    Triangle(double high,int bottom){
        this.bottom=bottom;
        this.high=high;
    }
    public double aera(){
        double s=bottom*high;
        return s;
    }
}

public class Test2 {
    public static void main(String[] args) {
        Triangle t1=new Triangle(2.0);
        System.out.println(t1.aera());
        Triangle t2=new Triangle(5);
        System.out.println(t1.aera());
        Triangle t3=new Triangle(2.0,5);
        System.out.println(t3.aera());
    }
}
```

运行结果：

0.0

0.0

10.0

实验项目 3、static 关键字的用法（粘贴代码及运行结果），

```
import java.util.Arrays;
import java.util.Scanner;
class MyArray {
    public static int getMax(int[] a) {
        Arrays.sort(a);
        return a[a.length-1];
    }
    public static void selectSort(int[] a) {
        for(int i=0;i<a.length-1;i++){
            int k=i;
            for(int j=k+1;j<a.length;j++){
                if(a[j]<a[k]){
                    k=j;
                }
            }
            if(i!=k){
                int temp=a[i];
                a[i]=a[k];
                a[k]=temp;
            }
        }
        System.out.println(Arrays.toString(a));
    }
}
public class Test3 {
    public static void main(String[] args) {
        Scanner scanner=new Scanner(System.in);
        System.out.println("输入数组长度: ");
        int a_len=scanner.nextInt();
        int[] a=new int[a_len];
        System.out.println("输入数组: ");
        for(int i=0;i<a_len;i++){
            a[i]=scanner.nextInt();
        }
        System.out.println(MyArray.getMax(a));
        MyArray.selectSort(a);
    }
}
```

输入数组长度:

5

输入数组:

0

23

1

-67

33

33

[-67, 0, 1, 23, 33]

