2017年

一、DBAAB BBCDD ADBBB

```
//2017.三.1
import java.util.*;
public class Main
{
     float f(float x,int n){//递归计算通项的值
         if(n==0){
              return 1;
         }
         else {
              return f(x,n-1)*x*x*(-1)/(2*n)/(2*n-1);
         }
    }
     public static void main(String[] args){
         Scanner sc=new Scanner (System.in);
         float a=sc.nextFloat();
         Main k=new Main();
         System.out.print("cos("+a+") = ");
         int n=0;
         float s=0;
         do{
              s=s+k.f(a,n);
              n=n+1;
         }while(k.f(a,n)<=-0.00001||k.f(a,n)>=0.00001);//精度达到 0.00001
         System.out.print(s);
```

```
}
}
//2017.三.2
class Teacher{
     private int age;
     private String name, education, position;
     Teacher(String a,int b,String c,String d)
     {
         name=a;
         age=b;
         education=c;
         position=d;
     }
     public String getname(){
         return name;
     }
     public void setname(String a){
         name=a;
     }
     public String geteducation(){
         return education;
     public void seteducation(String a){
         education=a;
     }
     public String getposition(){
         return position;
     }
     public void setposition(String a){
         position=a;
     }
     public int getage(){
         return age;
     }
     public void setage(int a){
         age=a;
     }
     public String introduction(){
         return "大家好! 我是"+getname()+", 我今年"+getage()+"岁, 学历"+geteducation()+",
目前职位是"+getposition();
    }
public class TeacherTest{
```

```
public static void main(String[] args){
    Teacher t=new Teacher("abc",22,"本科","大学生");
    System.out.println(t.introduction());
}
```

```
//2017.三.3
class Animal
{
    protected int legs;
    protected Animal(int legs){
         this.legs=legs;
    }
    protected String walk(){
         return "这个动物用"+legs+"条腿走路";
    }
    public int getLegs(){
         return legs;
    }
}
interface Pet{
    String play();
}
class Cat extends Animal implements Pet
    private String name;
    public String play(){
         return name+"爱好抓老鼠";
    }
    Cat(int legs,String name){
                             //注意 super 使用
         super(legs);
         this.name=name;
    }
    public String getName(){
         return name;
```

```
}
}
class Fish extends Animal implements Pet
     private String name;
     public String play(){
         return name+"爱好游泳";
    }
     Fish(int legs,String name){
                                //注意 super 使用
         super(legs);
         this.name=name;
     }
     public String getName(){
         return name;
    }
}
public class TestAnimal{
     static public void main(String[] args){
     Animal[] animals = new Animal[2];
     animals[0] = new Cat(4, "豆豆");
     animals[1] = new Fish(0, "蓝宝石");
     for (Animal ani : animals) {
     System.out.println(ani.walk());
     if (ani instanceof Pet) {
     System.out.println(((Pet) ani).play());
     }
    }
   }
}
```