**interface**

**package** com.java.pgms;

**import** java.util.Scanner;

**public** **class** Rectangle **implements** AP

{

**int** l=0,b=0;

**double** area,perimeter;

**public** **void** input()

{

Scanner s=**new** Scanner(System.*in*);

System.*out*.println("enter the length of the rectnglle");

l=s.nextInt();

System.*out*.println("enter the breadth of the rectangle");

b=s.nextInt();

}

**public** **void** area()

{

area=l\*b;

System.*out*.println("area of rectangle:"+area);

}

**public** **void** perimeter()

{

perimeter=2\*(l\*b);

System.*out*.println("peremiter of rectangle:"+perimeter);

}

}

**package** com.java.pgms;

**import** java.util.Scanner;

**interface** AP

{

**void** input();

**void** area();

**void** perimeter();

}

**public** **class** Circle **implements** AP

{

**int** r=0;

**double** pi=3.14,area=0,perimeter=0;

**public** **void** input()

{

Scanner sc=**new** Scanner(System.*in*);

System.*out*.println("enter the radius of the circle");

r=sc.nextInt();

}

**public** **void** area()

{

area=pi\*r\*r;

System.*out*.println("area of circle"+area);

}

**public** **void** perimeter()

{

perimeter=3.14\*r\*r;

System.*out*.println("perimeter of circle:"+perimeter);

}

}

**package** com.java.pgms;

**import** java.util.Scanner;

**public** **class** Mainrc

{

**public** **static** **void** main (String[] args)

{

**int** ch;

Circle c=**new** Circle();

Rectangle r=**new** Rectangle();

Scanner s=**new** Scanner(System.*in*);

System.*out*.println("1.area of circle\n 2.area of rectangle\n3.perimeter of circle\n4.perimeter of rectangle\n5.exit");

ip:**while**(**true**)

{

System.*out*.println("make your choice");

ch=s.nextInt();

**switch**(ch)

{

**case** 1:c.input();

c.area();

**break**;

**case** 2:r.input();

r.area();

**break**;

**case** 3:c.input();

c.perimeter();

**break**;

**case** 4:r.input();

r.perimeter();

**case** 5:**break** ip;

**default**:System.*out*.println("invalid entry");

}

}

}

}