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1BM19CSI78

```java
import java.util.scanner;
abstract class shape
{
  int a;
  int b;
shape (int a, int b)
{ this.a =a;
  this.b =b;
}
shape (int a)
{ this.a =a;
}
shape ()
{ this.a =o;
  this.b =o;
}
void printArea()
{
}
}

class triangle extends shape
{ triangle (int a, int b)
   {super (a,b);}
```

```java
void printArea()
{ system.out.println("the area of the rectangle
                is = " + (a*b));
}
}


class circle extends shape
{ circle (int a)
{ super(a); }

void printArea()
{ system.out.println("the area of the circle is
    = " + (3.14*a*a));
}
}

class shapes {
public static void main (string args[])
{ scanner scan =new scanner (system.in);
  int ch, a, b;
  while (true){
    system.out.println ("Enter 1 For TRIANGLE");
    system.out.println("ENTER 2 FOR RECTANGLE");
    system.out.print("ENTER 3 FOR CIRCLE");
    system.out.println ("ENTER 4 FOR EXIT");
```

```java
ch = scan.nextInt();
switch (ch)
{ case 1: System.out.print("Enter the base and
          height of triangle");

     a = scan.nextInt();
     b = scan.nextInt();

     triangle t = new triangle(a, b);
       t.printArea();
       break;


Case 2: System.out.println("enter the length
        and breadth of rectangle");

     a = scan.nextInt();
     b = scan.nextInt();

     rectangle r = new rectangle(a, b);
       r.printArea();
       break;

Case 3: System.out.println("enter the radius
              of the circle");

        a = scan.nextInt();
        Circle c = new circle(a);
          c.printArea();
          break;
```

```java
case 4: scan-close();
    break;
default : system.out.println("invalid input");
}
}


}

}
```