

2/9/24

- Q. Develop a Java program to create an abstract class named Shape that contains 2 integers and an empty method name ~~printArea~~ printArea(). Provide 3 classes named Rectangle, Triangle and circle such that one of the classes extends the class Shape. Each one of the classes contain only the method ~~printArea()~~ printArea() that prints the area of the given shape.

Steps :

1. Add class InputScanner
2. Add class shape extend InputScanner
3. Add class Rectangle extends Shape.
4. Add class Triangle extends Shape.
5. Add class Circle extends Shape.

or Add

→ import java.util.Scanner;

abstract class shape

{

double dim1, dim2, radius;

shape (double a, double b)

{

dim1 = a

dim2 = b

{

shape (double a)

class circle extends shape
 {
 double radius = 9; sub → update
 abstract void area(); import
 more basic ability. (202) of having
 class rectangle extends shape
 {
 rectangle (double a, double b)
 super(a, b);
 void area()

System.out.println("area of rect is:
 " + (dim1 * dim2));

class triangle extends shape

triangle (double a, double b)

super(a, b);

void area() {

System.out.println("area of triangle
 " + (dim1 * dim2) / 2);

(Pelduat) 202

```

class circle extends shape {
    double a;
    super();
    void area() {
        System.out.println("area of circle is: "
            + (3.14 * (radius * radius)));
    }
}
    
```

class AbstractAreaMain

```

public static void main(String args[]) {
    Scanner s = new Scanner(System.in);
    System.out.println("enter name: ");
    System.out.println("enter your usn: "
        + IBM22CS245);
}
    
```

~~System.out.println("enter length & breadth of rect: ");~~

double l = s.nextInt();

double b = s.nextInt();

System.out.println("enter base and height of triangle: ");

double r = s.nextInt();

Shape su;

rectangle rect = new rectangle (l, b);
triangle tri = new triangle (ht, bs);
circle cir = (new circle (r));
sh = rect;
sh = area (c);
sh = tri;
sh = area (?) ;
sh = cir;
sh = area (c);

O/P :

enter length of each m. of rekt. :)

5 10

center of triangle and weight of base

18 May 2010 - 2: groundwater

19 Jan 1918.

enter the circle:

984-810000000000000000

the middle enough

area of rent is : 50.0

~~area of triangle is $98 \div 6$~~

~~Area of circle is~~ 1962.5

100 feet two 2000 head

Wood (Aug 19) 10 km N

1960-1961

IN 2 1960