

ANS 4:-

```
import java.util.Scanner;

abstract class shape{

    int a;

    int b;

    abstract void printArea();

}

class rectangle extends shape{

    Scanner sc=new Scanner(System.in);

    void printArea(){

        System.out.println("Enter the length of rectangle:");

        a=sc.nextInt();

        System.out.println("Enter the breadth of rectangle:");

        b=sc.nextInt();

        System.out.println("Area:"+a*b);

    }

}

class triangle extends shape{

    Scanner sc=new Scanner(System.in);

    void printArea(){

        System.out.println("Enter the base of triangle:");

        a=sc.nextInt();

        System.out.println("Enter the height of triangle:");

        b=sc.nextInt();

        System.out.println("Area:"+a*b/2);

    }

}

class circle extends shape{

    double res;
```

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

void printArea(){

    System.out.println("Enter the radius of circle:");

    a=sc.nextInt();

    res=(double)3.14*(a*a);

    System.out.println("Area:"+res);

}

}

class Testj{

    public static void main(String args[]){

        rectangle r=new rectangle();

        triangle t=new triangle();

        circle c=new circle();

        r.printArea();

        t.printArea();

        c.printArea();

    }

}
```

```
Command Prompt
D:\Java programs>javac Test.java
D:\Java programs>java Testj
Enter the length of rectangle:
2
Enter the breadth of rectangle:
3
Area:6
Enter the base of triangle:
4
Enter the height of triangle:
5
Area:10
Enter the radius of circle:
3
Area:28.26
D:\Java programs>
```

