

```
/*
```

```
* Write a program using a function called area() to compute the area  
of a:
```

```
  i. Circle ( $\pi * r * r$ )
```

```
  ii. Square (side * side)
```

```
  iii. Rectangle (length * breadth)
```

```
  Display the menu to output the area as per the user's choice
```

```
*/
```

```
import java.util.*;
```

```
class Area {
```

```
    void area(double r) {
```

```
        double areaOfCircle = 3.14 * r * r;
```

```
        System.out.println("The area of the circle is " + areaOfCircle + "  
sq cm");
```

```
    }
```

```
    void area(int s) {
```

```
        int areaOfSquare = s * s;
```

```
        System.out.print("The area of the square is " + areaOfSquare + "  
sq cm");
```



```
}
```

```
void area(int l, int b) {
```

```
    int areaOfRectangle = l * b;
```

```
    System.out.print("The area of the rectangle is " +  
areaOfRectangle + " sq cm");
```

```
}
```

```
public static void main(String[] args) {
```

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

```
    double radius;
```

```
    int side, length, breadth;
```

```
    char choice;
```

```
    Area obj = new Area();
```

```
    System.out.print("Enter the choice ('c' - circle, 's' - square, 'r' -  
rectangle): ");
```

```
    choice = sc.next().toLowerCase().charAt(0);
```

```
    switch (choice) {
```

```
        case 'c': {
```

```
            System.out.print("Enter the radius: ");
```



```
radius = sc.nextDouble();
    obj.area(radius);
    break;
}
case 's': {
    System.out.print("Enter the side: ");
    side = sc.nextInt();
    obj.area(side);
    break;
}
case 'r': {
    System.out.print("Enter the length: ");
    length = sc.nextInt();
    System.out.print("Enter the breadth: ");
    breadth = sc.nextInt();
    sc.close();

    obj.area(length, breadth);
    break;
}
```



```
default: {
```

```
    System.out.println("Invalid choice entered");
```

```
}
```

```
}
```

```
}
```

```
}
```

## Output:

Dearness allowance: 10000 rupees

House rent allowance: 6000 rupees

Provident fund: 3332 rupees

Net pay: 56000 rupees

Gross pay: 52668 rupees