Ex.No: 6c	AREA OF SHAPE USING FUNCTION
Date :	

AIM:

To writea python program to calculate the area of shape using function.

ALGORITHM:

1. Start the program.
2. Calculate the area by giving the name of the shape.
3. If it is rectangle, enter the value of length and breadth.
4. Area of rectangle is calculated by using the formula
   rect_area=length*breadth
5. If it is square, enter the side length.
6. Area of square is calculated by using the formula
   sqt_area=s*s
7. If it is triangle, enter triangle's height and breadth length.
8. Area of triangle is calculated by using the formula
   tri_area=0.5*b*h
9. If it is circle, enter circle's radius length.
10. Area of circle is calculated by using the formula
    circ_area = pi*r*r
11. If it is parallelogram, enter the base and height length.
12. Area of parallelogram is calculated by using the formula
    para_area=b*h
13. Stop the program.

Program:

```
def calculate_area(name):\

  # converting all
characters   # into lower
cases   name =
name.lower()

  # check for the conditions
if name == "rectangle":
   l = int(input("Enter rectangle's length: "))
b = int(input("Enter rectangle's breadth: "))

   # calculate area of rectangle
rect_area = l * b     print(f"The
area of rectangle is
        {rect_area}.")

  elif name == "square":
   s = int(input("Enter square's side length: "))

   # calculate area of square
sqt_area = s * s     print(f"The
area of square is
        {sqt_area}.")

  elif name == "triangle":
   h = int(input("Enter triangle's height length: "))
b = int(input("Enter triangle's breadth length: "))

   # calculate area of triangle
tri_area = 0.5 * b * h
print(f"The area of triangle is
```

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        {tri_area}.")

  elif name == "circle":
    r = int(input("Enter circle's radius length: "))
pi = 3.14

    # calculate area of circle
circ_area = pi * r * r
print(f"The area of triangle is
        {circ_area}.")

  elif name == 'parallelogram':
    b = int(input("Enter parallelogram's base length: "))
h = int(input("Enter parallelogram's height length: "))
# calculate area of parallelogram     para_area = b * h
print(f"The area of parallelogram is
        {para_area}.")

  else:
    print("Sorry! This shape is not available")

# driver code if __name__
== "__main__" :

  print("Calculate Shape Area")   shape_name = input("Enter the name of
shape whose area you want to find: ")

  # function calling
calculate_area(shape_name)
```

OUTPUT:

Calculate Shape Area

Enter the name of shape whose area you want to find: rectangle

Enter rectangle's length: 3

Enter rectangle's breadth: 3

The area of rectangle is 9.

Calculate Shape Area

Enter the name of shape whose area you want to find: square

Enter square's side length: 4

The area of square is 16.

Calculate Shape Area

Enter the name of shape whose area you want to find: parallelogram

Enter parallelogram's base length: 5

Enter parallelogram's height length: 6

The area of parallelogram is 30.

Calculate Shape Area

Enter the name of shape whose area you want to find: circle

Enter circle's radius length: 7

The area of circle is 153.86.

Calculate Shape Area

Enter the name of shape whose area you want to find: triangle

Enter triangle's height length: 8

Enter triangle's breadth length: 9

The area of triangle is 36.0.

RESULT:

Thus the python program to calculate the area of shape using function is executed.