

1. area of a circle using math function

```
ans:import math
    r = float(input("enter the radius of circle"))
Area=math.pi*r*r
print("Area of circle is :",Area)
```

2.Area of Regular Polygon using math function

```
ans:n = int(input("Number of sides : "))
s = float(input("Length of a side : "))
p_area = n*(s**2)/(4*math.tan(math.pi/n))
print("The area of a regular polygon : ",p_area)
```

3. Area of a Segment of a Circle using math function

```
ans:
def area_of_segment(radius,angle):
    area_of_sector = math.pi * (radius * radius) * (angle / 360)
    area_of_triangle = 0.5 *(radius * radius) *math.sin((angle * math.pi) / 180)
    return area_of_sector-area_of_triangle

radius = float(input("Radius of circle : "))
angle = float(input("Angle enclosed by the segment : "))
print("Area of minor segment :",area_of_segment(radius,angle))
print("Area of major segment :",area_of_segment(radius,360-angle))
```

4.shuffle list

```
ans:import random
x = [100,1,2,3,30,40,'hi','hello']
random.shuffle(x)
print(x)
```

5.#generate random numbers between 1,10000

```
ans:
x=list(range(1,10000,50))
print(x)
```