

Create a package graphics with modules rectangle, circle and sub-package 3D-graphics with modules cuboid and sphere. Include methods to find area and perimeter of respective figures in each module. Write programs that finds area and perimeter of figures by different importing statements.

Graphics package

circle.py

```
import math
x=math.pi
def area(r):
    return x*(r*r)
def peri(r):
    return 2*x*r
```

rec.py

```
def area(l,w):
    return l*w
def peri(l,w):
    return 2*(l+w)
```

3-D graphics

cube.py

```
def area(l,h,w):
    x=(2*l*w)+(2*l*h)+(2*h*w)
    return x
def peri(l,h,w):
    x=4*(l+h+w)
    return x
```

sphere.py

```
import math
x=math.pi
def area(r):
    y=4*x*(r*r)
    return y
```

show.py

```
from graphics import rec,circle

import cube
import sphere

print("Perimeter of rectangle : ",+rec.peri(2,8))
print("Area of rectangle : ",+rec.area(2,8))
print("Area of Circle : ",+circle.area(2))
print("Perimeter of Circle : ",+circle.peri(2))
print("Area of Cuboid: ",+cube.area(2,3,5))
print("Perimeter of Cuboid : ",+cube.peri(2,3,5))
print("Area of Sphere : ",+sphere.area(5))
```

output

Perimeter of rectangle : 20

Area of rectangle : 16

Area of Circle : 12.566370614359172

Perimeter of Circle : 12.566370614359172

Area of Cuboid: 62

Perimeter of Cuboid : 40

Area of Sphere : 314.1592653589793