



Daffodil
International
University

Assignment

COURSE TITLE: Object Oriented Programming || Lab

COURSE CODE: CSE 222

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- 1 Create a class called shape with a method “calculate_area()”. Then create two subclasses: “Rectangle” and “circle”. override the calculate_area() method in each subclass to calculate the area of a rectangle and a circle, respectively. Finally, create instances of both subclasses and call the calculate_area() method on each.

```
[ ]: class Shape:
    def calc_area(self):
        pass

class Rectangle(Shape):
    def __init__(self, length, width):
        self.length = length
        self.width = width

    def calc_area(self):
        return self.length * self.width

class Circle(Shape):
    def __init__(self, radius):
        self.radius = radius

    def calc_area(self):
        return 3.14 * self.radius**2

rectangle = Rectangle(5, 4)
print("Area of Rectangle:", rectangle.calc_area())

circle = Circle(3)
print("Area of Circle:", circle.calc_area())
```