

```
product = lambda x, y: x * y
output = product(5, 6)
print(output)
```

30

```
import math
def circle_area(radius):
    return math.pi * radius ** 2
output = circle_area(10)
print(output)
```

314.1592653589793

```
def calculator(a, b, operation):
    if operation == 'a': # Addition
        return a + b
    elif operation == 's': # Subtraction
        return a - b
    elif operation == 'm': # Multiplication
        return a * b
    elif operation == 'd': # Division
        return a / b if b != 0 else "Error: Division by zero"
    else:
        return "Error: Invalid operation"
output = calculator(2, 5, 'd')
print(output)
```

0.4

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

    def area(self):
        return self.length * self.width
r = Rectangle(5, 10)
print(r.area()) # Output: 50
```

50

```
class Shape:
    def __init__(self, name, length):
        self.name = name
        self.length = length
    def area(self):
        return 0
class Square(Shape):
    def __init__(self, name, length):
        super().__init__(name, length)
```

```
def area(self):  
    return self.length ** 2  
def describe(self):  
    return f"This is a: {self.name}"  
s = Square('square', 5)  
print("The area is:")  
print(s.area())  
print(s.describe())
```

The area is:

25

This is a: square