Assignment 3

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In [3]:
```
# Lambda
product = lambda x, y: x * y

result1 = product(5, 6)
print(result1)
```

```
30
```

In [4]:
```
import math
def circle_area(radius):
    return math.pi * radius ** 2

result2 = circle_area(10)
print(result2)
```

```
314.1592653589793
```

In [5]:
```
def calculator(a, b, op):
    if op== 'a':
        return a + b
    elif op== 's':
        return a - b
    elif op == 'm':
        return a * b
    elif op == 'd':
        return round(a / b, 2)
    else:
        return "Invalid operation"


result3 = calculator(2, 5, 'd')
print(result3)
```

```
0.4
```

In [7]:
```
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())
```

```
50
```

In [8]:
```
class Shape:
    def __init__(self, name, length=0):
        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("This area is:")
print(s.area())
print(s.describe())
```

```
This area is:
25
This is a: square
```

In [ ]:
```

```