Assignment 3

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- Exercise 1

In [4]:
```
x = lambda num1,num2: num1*num2
x(5,6)
```

Out[4]:
```
30
```

- Excercise 2

In [10]:
```
import math
def area_of_the_circle(radius):
    area = math.pi * radius ** 2
    return area
print(area_of_the_circle(10))
```

```
314.1592653589793
```

- Exercise 3

In [7]:
```
print('Choose operation you want: ')
print('Choose a for addition')
print('Choose s for subtraction')
print('Choose m for multiplication')
print('Choose d for division')
a = int(input('Enter first number: '))
b = int(input('Enter second number: '))
o = input('choose operator: ')

class Calculator:
    def __init__(self):
        pass

    def add(self, a, b):
        return a+b

    def sub(self, a, b):
        return a-b

    def mul(self, a, b):
        return a*b

    def div(self, a, b):
        return a/b

    def perform(self, a, b, o):
        if o == 'a':
            result = self.add(a, b)
        elif o == 's':
            result = self.sub(a, b)
        elif o == 'm':
            result = self.mul(a, b)
        elif o == 'd':
            result = self.div(a, b)
        else :
            print("this operator isn't supported")

        print(f'Result : {result}')

c = Calculator()
c.perform(a,b,o)
```

```
Choose operation you want:
Choose a for addition
Choose s for subtraction
Choose m for multiplication
Choose d for division
Enter first number: 2
Enter second number: 5
choose operator: d
Result : 0.4
```

- Exercise 4

In [6]:
```
class Rectangle():

    def __init__(self,width,length):
        self.width=width
        self.length=length

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

a = int(input("Enter length of rectangle: "))
b = int(input("Enter width of rectangle: "))
r = Rectangle(a,b)
print('Area of rectangle: ',r.area())

print()
```

```
Enter length of rectangle: 5
Enter width of rectangle: 10
Area of rectangle:  50
```

- Exercise 5

In [44]:
```
class Square:
    area = 0
    def __init__(self, name):
        self.name = name


class Subclass_square(Square):

    def __init__(self, length):
        self.length = length

    def area(self):
        a = (self.length**2)
        print('The area is: ',a)

s =(Subclass_square(5))
s.area()
```

```
The area is:  25
```