Assignment 3

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1 Assignment 3

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2 Rinkal Kalubhai Dhameliya

3 Exercise 3

[183]:
```
r = lambda num1, num2: num1*num2
r(5,6)
```

[183]: 30

[184]:
```
import math
radius = float(input ("input the radius of the circle : "))
area = math.pi * radius * radius
print("The area of the circle is : {0}".format(area))
```

```
input the radius of the circle :  10
```

```
The area of the circle is : 314.1592653589793
```

[185]:
```
def calculator(num1, num2, operator):
    if operator == 'a':
        return num1 + num2
    elif operator == 's':
        return num1 - num2
    elif operator == 'm':
        return num1 * num2
    elif operator == 'd':
        return num1 / num2
    else:
        return 'Invalid operator'

num1=int(input("enter first number :- "))
num2=int(input("enter second number :- "))
print("available operator:")
print("Addition :- a")
```

```
print("Substraction :- s")
print("Multiplication :- m")
print("Division :- d")
operator=str(input("enter operator :- "))
print(calculator(num1, num2, operator))
```

```
enter first number :-  2
enter second number :-  5

available operator:
Addition :- a
Substraction :- s
Multiplication :- m
Division :- d

enter operator :-  d

0.4
```

[186]:
```
class Rectangle():
    def __init__(self, l, w):
        self.length = l
        self.width  = w

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

newRectangle = Rectangle(5, 10)
print(newRectangle.rectangle_area())
```

```
50
```

[189]:
```
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):
        print("This is a:", self.name)
```

```
s = Square('square', 5)
print("The area is:")
print(s.area())
s.describe()
```

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