ASSIGNMENT 3

Date: 13-FEB-2024

HONG THANH

1.Exercise 1

```
In [1]: multiply = lambda x,y:x*y
        multiply(5,6)
```

Out[1]: 30

2.Exercise 2

```
In [7]: from math import pi
        area_circle = lambda r:pi*(r**2)
        area_circle(10)
```

Out[7]: 314.1592653589793

```
In [3]: import math
        pi=math.pi
        def area_cicle(r):
            return pi*r**2
        area_cicle(10)
```

Out[3]: 314.1592653589793

3.Exercise 3

```
In [4]: def caculate(num1,num2,operation):
            if operation == "a":return num1 + num2
            if operation == "s":return num1 - num2
            if operation == "m":return num1 * num2
            if operation == "d":return num1 / num2
        caculate(2,5,"d")
```

Out[4]: 0.4

4.Exercise 4

```
In [5]: class Rectangle:
            def __init__(self, length, width):
                self.l= length
                self.w = width
            def area(self) :
                return self.l*self.w
        r=Rectangle(10,5)
        r.area()
```

Out[5]: 50

5.Exercise 5

```
In [19]: class Shape:
             def __init__(self, name, length):
                 self.n = name
                 self.l = length
             def area(self):
                 return #return 0
         class Square(Shape): # subclass of Shape
             def __init__(self, name, length):
                 super().__init__(name, length) # Shape.__init__(self, name, length), Inheritance of Shape
             def area(self):
                 print("The area is:")
                 return self.l**2
             def describle(self):
                 return("This is a: square")
         s=Square("square",5) # s is an instantiation
         print(s.area())
         print(s.describle())
```

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