Assignment 3

Natthakorn Rattanakun

Exercise 1

```
x = lambda num1,num2: num1*num2
x(5,6)
```

```
30
```

Exercise 2

```
from math import pi
def area_of_circle(r):
 return pi*r**2
area_of_circle(10)
```

```
314.1592653589793
```

Exercise 3

```
def calculator(num1,num2,op):
 if op == 'a':
  return num1 + num2
 elif op == 's':
  return num1 - num2
 elif op == 'm':
  return num1 * num2
 elif op == 'd':
  return num1 / num2
calculator(2,5,'d')
```

```
0.4
```

Exercise 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)
r.area()
```

```
50
```

Exercise 5

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

```
The area is:
25
```

```
s.describe()
```

```
     This is a: square
```

```
print(s.area())
s.describe()
```

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