Assignment 3

Due date: 24/3/2022

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exercise 1

In [38]:
```
x = lambda num1, num2: num1*num2
print(x(5,6))
```

```
30
```

exercise 2

In [39]:
```
import math
pi = math.pi
def area(radius):
    return(radius**2*pi)
print("The area of the circle is:", area(10))
```

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

exercise 3

In [40]:
```
def operator(num1, num2, operation):
    if operation == 'a':
        return num1 + num2
    elif operation == 's':
        return num1 - num2
    elif operation == 'm':
        return num1 * num2
    elif operation == 'd':
        return num1 / num2
print(operator(2,5,'d'))
```

```
0.4
```

exercise 4

In [41]:
```
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
```

exercise 5

In [42]:
```
class Shape:
    def __init__(self, name, length):
        self.name = name
        self.length = length
```

```
    def area(self):
        return 0

class Square(Shape):
    def area(self):
        print("The area is:",self.length ** 2)
    def describe(self):
        print("This is a:",self.name)

s = Square("square",5)
s.area()
s.describe()
```

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