

## Aung Thuya Han (EN - 001117)

5. Define a class named Shape and its subclass Square.

Shape objects can be constructed by name and length has an area function which return 0.

Square subclass has an init function which take a length and name as argument and has an area method and a describe method which prints the name of the Shape.

Print the area from Square class.

```
Run test for s = Square('square',5)
print(s.area())
print(s.describe())
```

Output: The area is: 25

This is a: square

```
In [2]: class Shape:
        def __init__(self, name, length):
            self.name = name
            self.length = length

        def area(self):
            return 0

        #to use Square class, we need to inherit from parent class

        class Square(Shape):
            def __init__(self, name, length):
                super().__init__(name, length)

            def area(self):
                return f"This area is: {self.length ** 2}"

            def describe(self):
                return f"This is a: {self.name}"

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

This area is: 25

This is a: square