

## Task 1

```
In [ ]: #Answer
#Class Triangle can also be found in "Geom_Directory" > "Geom1.py"
class Triangle(Geom):
    def __init__(self, base, height):
        self.base = base
        self.height = height
        super().__init__()

    #area method
    def area(self):
        return (self.base * self.height)*0.5
```

## Task 2

Reorganize these classes as a package with one or multiple modules. Import them into another Python Notebook or Script file to test them.

```
In [ ]: #Package/Directory = "Geom_Directory"
#Module = "Geom1.py"
```

```
In [ ]: #Importing Local Python module into Jupyter Notebooks
%load_ext autoreload
%autoreload 2
import os
import sys
module_path = os.path.abspath(os.path.join('../src'))
sys.path.insert(0, module_path)
```

```
In [ ]: #Importing module from local Python module
from Geom1 import *
```

Testing to see if imported module works:

```
In [ ]: #Square
#Testing
side = 8
my_square = Square(side)
my_square.print_name()
print('Area Test 3: My area is ', my_square.area())
```

My name is Bill and my color is PURPLE  
Area Test 3: My area is 64

```
In [ ]: #Testing
##Triangle
base = 6
height = 7
my_triangle = Triangle(base,height)
my_triangle.print_name()
print('Area Test 2: My triangle area is ', my_triangle.area())
```

My name is Hussain and my color is RED  
Area Test 2: My triangle area is 21.0

```
In [ ]: ##Square
side = 8
my_square = Square(side)
my_square.print_name()
print('Area Test 3: My area is ',my_square.area())
```

My name is Lammar and my color is PURPLE  
Area Test 3: My area is 64

```
In [ ]: #Circle
radius = 2
my_circle = Circle(radius)
my_circle.print_name()
print('Area Test 4: My area is ',my_circle.area())
```

My name is Josh and my color is RED  
Area Test 4: My area is 12.566370614359172