

ASSIGNMENT 03

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question 1

```
In [2]: lambda x,y: x*y
result=(lambda x,y: x*y)(5,6)
print(result)
```

30

questions 2

```
In [7]: import math
def area_of_circle(radius):
    area=math.pi*radius**2
    return area
#test the function with a radius of 10
radius =10
area= area_of_circle(radius)
print("the area of a circle with radius",radius,"is",area)
```

the area of a circle with radius 10 is 314.1592653589793

question 3

```
In [36]: def calculator (number1, number2, operation):

    if operation == 's' :
        return number1 + number2

    elif operation == 's' :
        return number1 - number2

    elif operation == 'm' :
        return number1 * number2

    elif operation == 'd' :
        return number1 / number2
    else :
        return "invalid operation"

result = calculator (2, 5,'d')
print (result)
```

```
File "C:\Users\chamara\AppData\Local\Temp\ipykernel_1464\120663161.py", line 4
    return number1 + number2
    ^
```

IndentationError: expected an indented block

question 4

```
In [20]: 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())
```

question 5

```
In [40]: 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 area(self):
            return self.length*self.length

        def describe(self):
            print("this is a shape"+self.name)

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

```
File "C:\Users\chamara\AppData\Local\Temp\ipykernel_1464\3886992418.py", line 2
    def __init__(self, name, length)
                                   ^
SyntaxError: invalid syntax
```

```
In [ ]:
```