THILINI SANDUMINI DIAS

ASSIGNMENT 03

DATE: 18TH SEPTEMBER 2024

EXERCISE 01

In [14]:
```
X =lambda num1,num2: num1*num2
X(2,3)
```

Out[14]: 6

EXERCISE 02

In [15]:
```
import math
def area_of_the_circle (Radius):
    area = Radius**2* math.pi
    return area

Radius = float(input("Please enter the radius of the given circle: "))
print("The area of the given circle is: ",area_of_the_circle(Radius))
```

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

EXERCISE 03

In [16]:
```
def addition(n1,n2):
    return n1 + n2

def subtraction(n1,n2):
    return n1 - n2

def multiplication(n1,n2):
    return n1 * n2

def division(n1,n2):
    return n1 / n2

print("select operations")
print("1.Addition\n"\
      "2.Subtraction\n"\
      "3.Multiplication\n"\
      "4.Division\n")
operation = int(input("Enter choice of operation 1/2/3/4: "))

n1 = float(input("Enter the First Number: "))
n2 = float(input("Enter the Second Number: "))
```

```
if operation== 1: print(n1,"+",n2,"=",addition(n1,n2))

elif operation== 2: print(n1,"-",n2,"=",subtraction(n1,n2))

elif operation== 3: print(n1,"*",n2,"=",multiplication(n1,n2))

elif operation== 4: print(n1,"/",n2,"=",division(n1,n2))

else: print("Invalid Input")
```

```
select operations
1.Addition
2.Subtraction
3.Multiplication
4.Division

5.0 * 3.0 = 15.0
```

In [17]:
```
class Rectangle():
    def __init__(self, l, w):
        self.length = l
        self.width  = w

    def rectangle_area(self):
        return self.length*self.width

a=int(input("Enter lenghth of Rectangle: "))
b=int(input("Enter width of Rectangle: "))
obj=Rectangle(a,b)
print("rectangle_area:",obj)

print()
```

```
rectangle_area: <__main__.Rectangle object at 0x000001904B380F50>
```

EXERCISE 05

In [18]:
```
class Shape(object):
    def __init__(self):
        pass
    def area(self):
        return 0

class Square(Shape):
    def __init__(self,l):
        Shape. __init__(self)
        self.length = 1

    def area(self):
        return self.length*self.length

aSquare = Square(3)
```

```
print (aSquare.area())
```

```
1
```

In [ ]: