PROJECT

ON OOPS CONCEPT

(MINI PROJECT)

Project on Simple Calculator

Summation, Multiplication, Subtraction, Power, floordiv, Mod, greater than, less than, division

Multiple inheritance Overloading

SOURCE CODE:

```
#C1=Calculator
class C1:#object class name is C1
    def __init__(self,a):
        self.a=a
    def __add__(self,b):
        return f"Summation of Simple Calculator ",self.a+b.a
    def __sub__(self,b):
        return f"Subtraction of Simple Calculator ",self.a-b.a
    def __mul__(self,b):
        return f"Multiplication  of Simple Calculator ",self.a*b.a
    def __truediv__(self,b):
        return f"__truediv__ of Simple Calculator ",self.a/b.a
    def __floordiv__(self,b):
        return f"__floordiv__ of Simple Calculator ", self.a//b.a
    def __pow__(self,b):
        return f"Power of Simple Calculator ",self.a**b.a
    def __mod__(self,b):
        return f"__Mod__ of Simple Calculator ",self.a%b.a

#C2,C3 is the Condition check
class C2:
```

```
    def gt(self,a,b):
        return f"Greater than of Simple Calculator ",a>b
class C3:
    def lt(self,a,b):
        return f"Less than of Simple Calculator ", a<b

#Display the data self C2 and C3
class display(C2,C3):
    def divide(self,a,b):
        return f"Division of Simple Calculator ",a/b



a1=C1(10)# instatiation
a2=C1(20)
a3=C1(50)
a4=C1(10)
print(a1+a2)
print(a3 + a4)
print(a1-a2)
print(a3-a4)
print(a1*a2)
print(a3*a4)
print(a1/a2)
print(a3/a4)
print(a1//a2)
print(a3//a4)
print(a1**a2)
print(a3**a4)
print(a1%a2)
print(a3%a4)

d=display()
```

```
print(d.gt(55,67))
print(d.lt(55,67))
print(d.divide(20,5))
```

OUTPUT:

```
('Summation of Simple Calculator ', 30)
('Summation of Simple Calculator ', 60)
('Subtraction of Simple Calculator ', -10)
('Subtraction of Simple Calculator ', 40)
('Multiplication  of Simple Calculator ', 200)
('Multiplication  of Simple Calculator ', 500)
('__truediv__ of Simple Calculator ', 0.5)
('__truediv__ of Simple Calculator ', 5.0)
('__floordiv__ of Simple Calculator ', 0)
('__floordiv__ of Simple Calculator ', 5)
('Power of Simple Calculator ', 10000000000000000000)
('Power of Simple Calculator ', 97656250000000000)
('__Mod__ of Simple Calculator ', 10)
('__Mod__ of Simple Calculator ', 0)
('Greater than of Simple Calculator ', False)
('Less than of Simple Calculator ', True)
('Division of Simple Calculator ', 4.0)
```