#### **Practical No.9**

#### **Roll No. 2049**

#### Q1) Single inheritance in python

```
class Parent1:
    def func_1(self):
        print ("This function is defined i
    nside the parent class.")

class Child1(Parent1):
    def func_2(self):
        print ("This function is defined i
    nside the child class.")

object = Child1()
    object.func_1()
    object.func_2()

Output:

Output

Hi.. I am Vivek
    Python Developer
```

```
class Parent1:
    def func1(self):
        print("This is Parent1 class")
class Parent2:
   def func2(self):
        print("This is Parent2 class")
class Child(Parent1, Parent2):
    def func3(self):
        print("This is Child class")
obj = Child()
obj.func1()
obj.func2()
obj.func3()
This is Parent1 class
This is Parent2 class
This is Child class
```

## Q3) Multilevel inheritance in python.

# Q2) Multiple inheritance in python.

```
class Grandparent:
      def func1(self):
           print("This is Grandparent class")
  class Parent(Grandparent):
      def func2(self):
           print("This is Parent class")
  class Child(Parent):
      def func3(self):
           print("This is Child class")
  obj = Child()
  obj.func1()
  obj.func2()
  obj.func3()
This is Grandparent class
  This is Parent class
  This is Child class
```

# Q4) Hierarchical inheritance in python.

```
class Parent:
    def func1(self):
        print("This is Parent class")

class Child1(Parent):
    def func2(self):
        print("This is Child1 class")

class Child2(Parent):
    def func3(self):
        print("This is Child2 class")

obj1 = Child1()
obj2 = Child2()

obj1.func1()
obj1.func2()

obj2.func3()
```

#### **Output:**

```
This is Parent class
This is Child1 class
This is Parent class
This is Child2 class
```

## Q4) Hybrid inheritance in python.

```
class Grandparent:
    def func1(self):
        print("This is Grandparent class")
class Parent(Grandparent):
    def func2(self):
        print("This is Parent class")
class Uncle(Grandparent):
    def func3(self):
        print("This is Uncle class")
class Child(Parent, Uncle):
    def func4(self):
        print("This is Child class")
obj = Child()
obj.func1()
obj.func2()
obj.func3()
obj.func4()
```

```
This is Grandparent class
This is Parent class
This is Uncle class
This is Child class
```