

Agenda : Inheritance : Passing the features.

why we need Inheritance:

```
class Dog:
    def run():
        '''
        '''
    }
```

```
class Tiger:
    def run():
        '''
        '''
    }
```

```
class cheetah:
    def run():
        '''
        '''
    }
```

DRY: Don't repeat yourself

```
class Human:
```

```
    def __init__(self):
```

```
        self.legs = 2
```

```
        self.hands = 2
```

```
    def eat(self):
```

```
        print("eating");
```

```
    def sleep(self):
```

```
        print("sleeping @ 9 PM");
```

```
class Men(Human):
```

```
    def look_for_women(self):
```

```
        print("Install bumble");
```

```
a = men()
```

```
a. look_for_women()
```

```
a. sleep()
```

overriding

```
class Human:
```

```
    def __init__(self):
```

```
        self.legs = 2
```

```
        self.hands = 2
```

```
    def eat(self):
```

```
        print("eating");
```

②

```
    def sleep(self):
```

```
print("Sleeping @ 9 PM");
```

```
class Men(Human):
```

```
    def look_for_women(self):
```

```
        print("Install bumble");
```

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```
    def sleep(self):
```

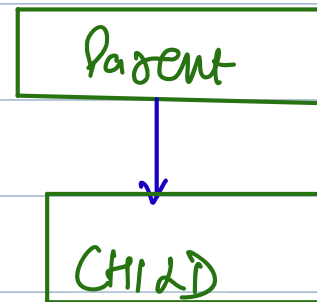
```
        print("Sleep at 4 AM");
```

```
a = men()
```

```
    a.sleep()
```

Type of Inheritance :

1) Single Inheritance



2) Multiple Inheritance :

```
class human:
    def __init__(self, legs):
        self.legs = legs;

    def first():
        Print (we believe in crony);

    def eat(self):
        Print ("eating")
```

class Male:

```
self -- init -- (self, name):
```

```
self.name = name
```

```
def flirt(self):
```

```
    print("flirting")
```

class Boy(Human, Male):

```
def sleep(self):
```

```
    print(Boy is sleeping);
```

```
    .  
    :
```

```
b = Boy()
```

```
b.sleep(); # boy sleep called.
```

b.flirt()

method of Parent

Father.method_name(b);

if don't want to follow MRO

class_name of Parent

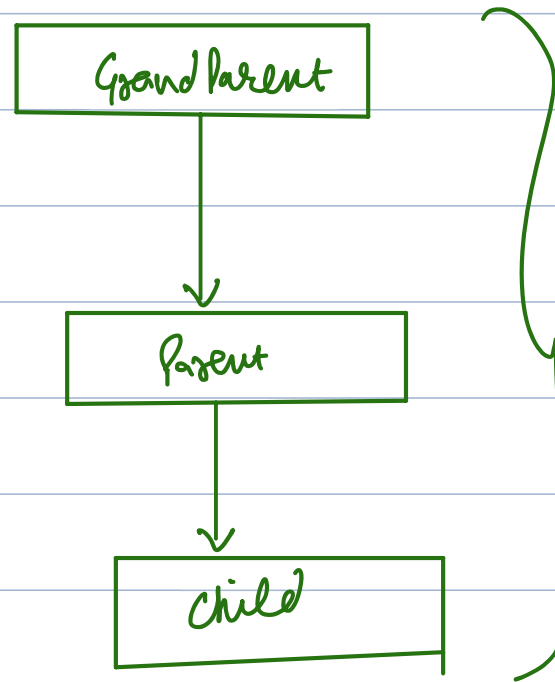
who's Parent.

PARENT 1

PARENT 2

CHILD

Multilevel Inheritance :

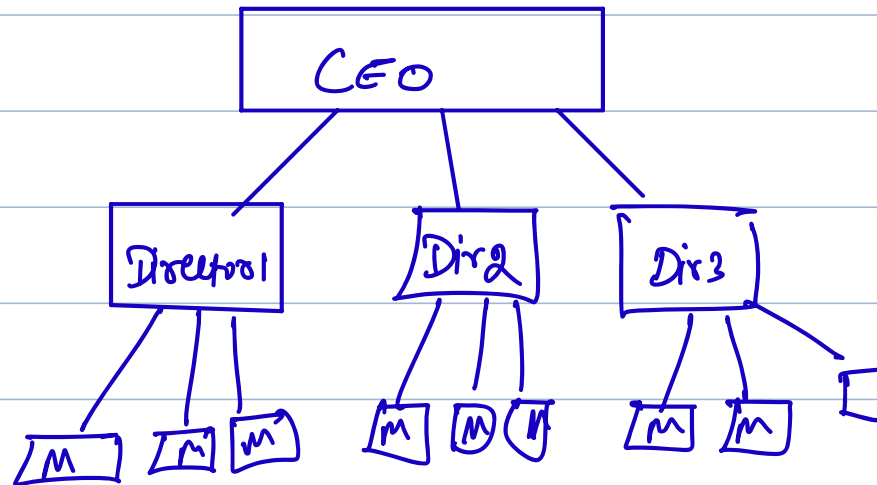


```
class GrandParent :  
    pass
```

```
class Parent(GrandParent)  
    pass
```


class child (Parent):
pass.

Hierarchical Inheritance :



Hybrid :

