# Inheritance in python

When a class derives from another class. The child class will inherit all the public and protected properties and methods from the parent class. In addition, it can have its own properties and methods, this is called as inheritance.

## Python inheritance Syntax

```
class Programmer:
    def __init__(self,name,id):
        self.name=name
        self.id=id

def showDetails(self):
        print(f"The name of Programmer is {self.name} and id is : {self.id}")

class JuniorDeveloper(Programmer):
    def showFrameWork(self):
        print("The default frame work is django.")
```

Junior Developer class inherits features from the Programmer class where new features can be added to it. This results in reusability of code.

## Types of inheritance

- 1. Single inheritance
- 2. Multiple inheritance
- 3. Multi-level inheritance
- 4. Hierarchical inheritance
- 5. Hybrid Inheritance

### Source Code

#### class Programmer:

```
def __init__(self,name,id):
        self.name=name
        self.id=id

def showDetails(self):
        print(f"The name of Programmer is {self.name} and id is : {self.id}")

class JuniorDeveloper(Programmer):
        def showFrameWork(self):
            print("The default frame work is django.")
pro=Programmer("MunawarJohar",148)
pro.showDetails()
pro2=Programmer("Raziq",432)
pro2.showDetails()
jdeveloper=JuniorDeveloper("Kamal Ali",321)
jdeveloper.showDetails()
jdeveloper.showDetails()
```

Thank You