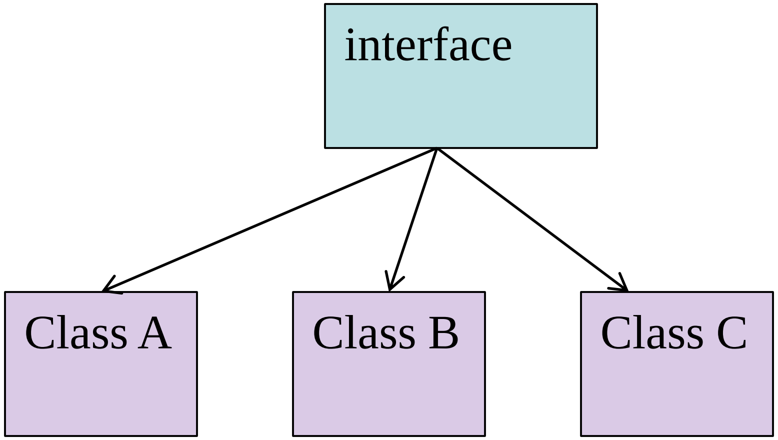
INTERFACE

Interface contains method signatures and declaration of static and final variables.

It never contains method implementation.

It is a kind of polymorphism.



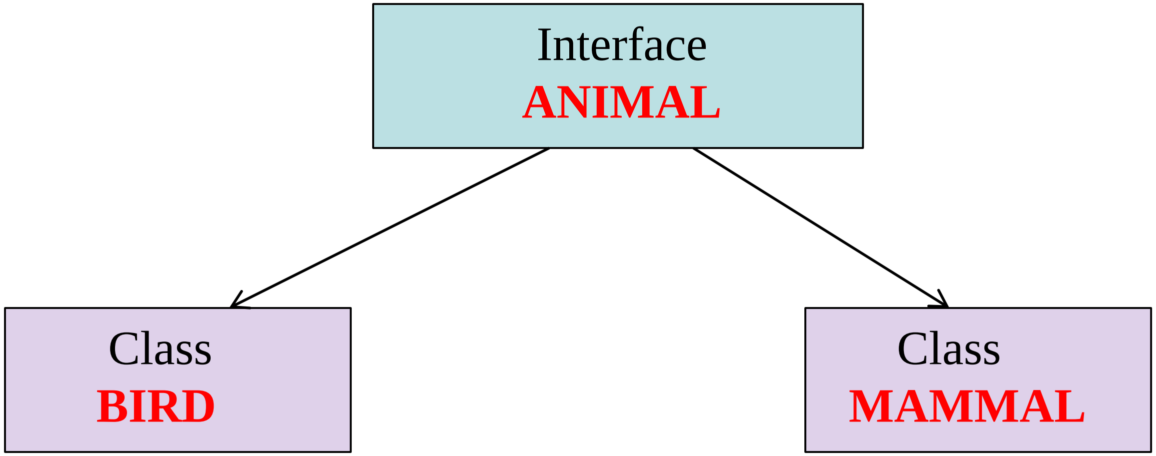
DEFINING AN INTERFACE

Define an interface

```
public  interface <interfacename>
 {
    returntype method1(parameter _list);
    returntype method2(parameter _list);
.
.
.
   returntype methodN(parameter _list);
}
```

Implement an interface

```
class <classname> implements <interfacename>
 {
     returntype method1(parameter _list);
          {
               // body of method1
           }

      returntype method2(parameter _list);
           {
                // body of method2
           }
.
.
.
       returntype methodN(parameter _list);
          {
               // body of methodN
          }

}
```



Interface
ANIMAL

Class
BIRD

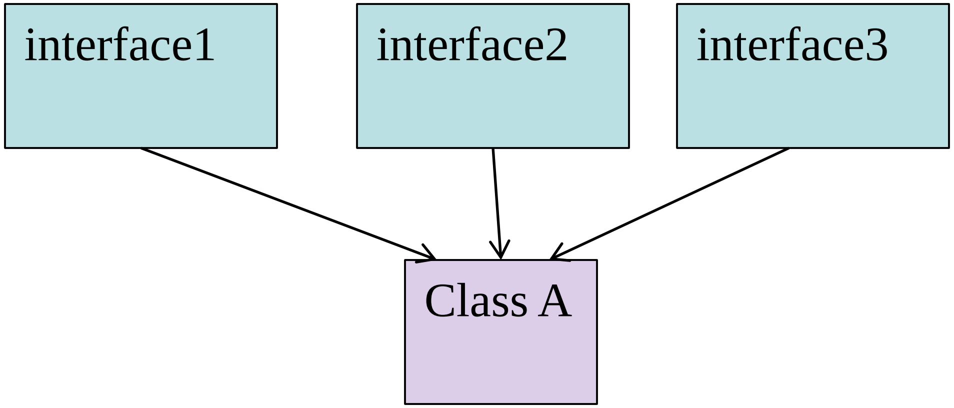
Class
MAMMAL

```
interface ANIMAL
{
  public void eat();
  public void travels();
}
```

```
class BIRD implements ANIMAL
{
  public void eat()
    {
      System.out.println(“Birds Eat”);
     }

  public void travel()
    {
      System.out.println(“Birds Travel”);
     }


}
```

```
class MAMMAL implements ANIMAL
{
  public void eat()
    {
      System.out.println(“Mammal Eat”);
     }

  public void travel()
    {
      System.out.println(“Mammals Travel”);
     }


}
```

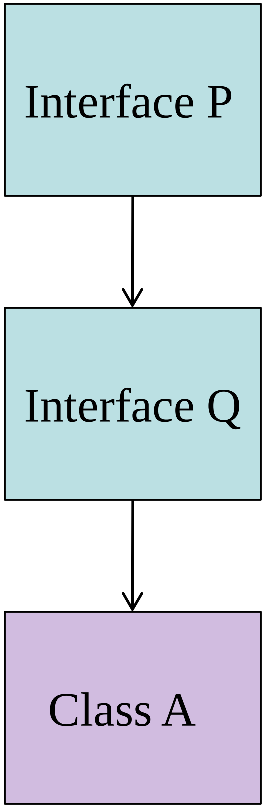
A CLASS CAN IMPLEMENT MORE THAN ONE INTERFACES AT A TIME



Implement an interface

class A implements **interface1, interface2, interface3**
 {
    //BODY
}

INTERFACE CAN EXTEND ANOTHER INTERFACE USING ‘extends’ KEYWORD


Interface P

Interface Q

Class A

```
interface P
{
  void  f1();
}
```

```
interface Q extends P
{
   void f2();
}
```

```
class A implements Q
 {
   void f1()
          {
     System.out.println(“Inside P”);
          }

  void f2()
          {
    System.out.println(“Inside Q”);
          }
}
```

```
class XYZ
{
    public static void main(String  args[])
             {
            A ka =new A();
            ka.f1();
            ka.f2();
            }
}
```