## ASSIGNMENT15.1

1. Write a simple program to show inheritance in scala.

```
abstract class Parent(name:String)//parent class
  //functions of parent class
  def statement = name + " is a " + typeOfAnimal
  def typeOfAnimal: String
//class cat extends parent class
class Cat(name:String) extends Parent(name){
  override def typeOfAnimal = "Cat"
//class Tiger extends parent class
class Tiger(name:String) extends Parent(name){
  override def typeOfAnimal = "Tiger"
//object of main class
object inher {
  def main(args:Array[String])
     var obj1=new Cat("Tom")//object of class cat
      println(obj1.statement)
      var obj2=new Tiger("Gadu")//object of class tiger
     println(obj2.statement)
  }
}
OutPut
Tom is a Cat
Gadu is a Tiger
ScreenShots
                                        Problems 🥏 Tasks 📮 Console 🛭
<terminated> inher$ [Scala Application] /usr/lib/jvm/java-1.7.0-openjdk-1.7.0.79.x
Tom is a Cat
Gadu is a Tiger
```

2. Write a simple program to show multiple inheritance in scala.

```
//multiple inheritance in scala via trait
trait One
{
```

```
def show() //function show
   println("class one")
 def displayone()
   println("class one normal method")
trait Two extends One
 override def show() //function overriding
   println("class two")
 def displaytwo()
   println("class two normal method")
}
//class four extends two trait and inheritance its features
class four extends One with Two //multiple inheritance
object MulInher {
  def main(args:Array[String])
  {
    var obj=new four() //object of the class four
    obj.show() //calling show it will call show in trait two
    obj.displayone()
   obj.displaytwo()
 }
}
OutPut
class two
class one normal method
class two normal method
Screeshots
```

```
Problems Tasks Console SConsole SConsol
```