21000123 – 2021/CS/012
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Scala Tutorial #2

one.scala two.scala three.scala four.scala

one.scala

```scala
object one{
    def a (k: Int, m: Int): Int = k+(12*m)

    def b (m: Int, j: Int): Double = m/j

    def c1 (n: Int, j: Int): Double = n%j

    def d1 (m: Int, j: Int): Double = m/j*j

    def e (f: Double, g: Double): Double = f+10*5+g

    def f1(i: Int, n: Int): Int =(i+1)*n

    def main(args: Array[String]): Unit = {
        var (k,i,j) = (2,2,2)
        var (m,n)=(5,5)
        var f :Double=12.0
        var g :Double=4.0
        var c='X'

        println(a(k,m))
        println(b(m,j))
        println(c1(n,j))
        println(d1(m,j))
        println(e(f,g))
        println(f1(i,n))
    }
}
```

62
2.0
1.0
4.0
66.0
15

- Scala’s syntax is more expressive than Java and lets programmers use compact code.
- While both languages supports OOP scala is able to combine its functional programming concepts with OOP. Java also includes functional programming support but its mainly treated as an OOP language.
- Both has a static stype system but sometimes scala is flexible so the compiler can deduce types.
- Java has built-in multithreading and concurrent programming support. While scala provides higher-level abstractions for concurrency and parallelism. Also scalas’s immuatble data structures and types provide ‘safe concurrent programming’
- Java is widely used in enterprise applications while scala focuses more on scaleable and functional programming.

one.scala | two.scala | three.scala | four.scala

two.scala

```scala
object two{
    def inc(x: Int): Int = x+1
    def dec(x: Int): Int = x-1

    def a1(b: Int, a: Int, c: Int, d: Int): Int = (b*a) + (c*d)

    def c1(g: Float, k: Float, c: Int): Float = -2*(g-k)+c

    def main(args: Array[String]): Unit = {


        var (a,b,c,d) = (2,3,4,5)
        var k: Float = 4.3f
        var g :Float=4.0f

        //b=inc(b)
        println(a1(dec(b),a,c,dec(d)))
        println(inc(a))
        println(c1(g,k,c))
        c=inc(c); println(c)
        c=inc(c)*inc(a); println(c)



    }
}
```

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5
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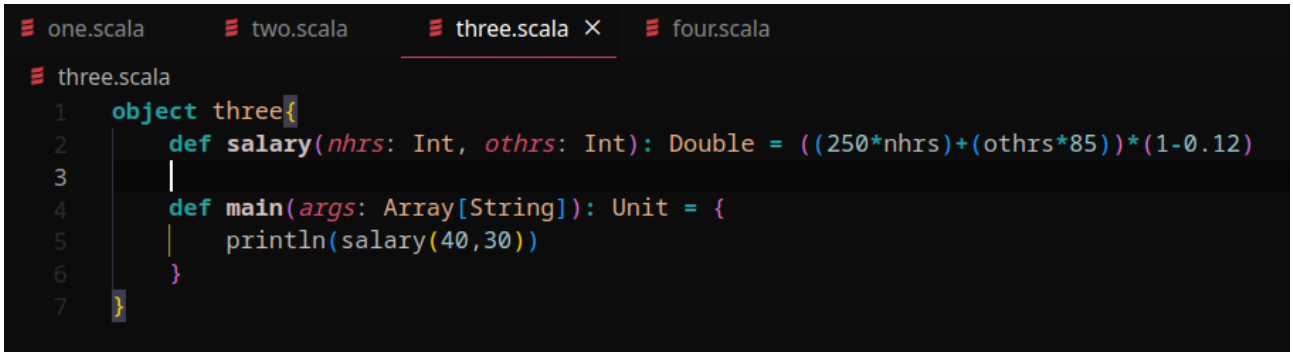

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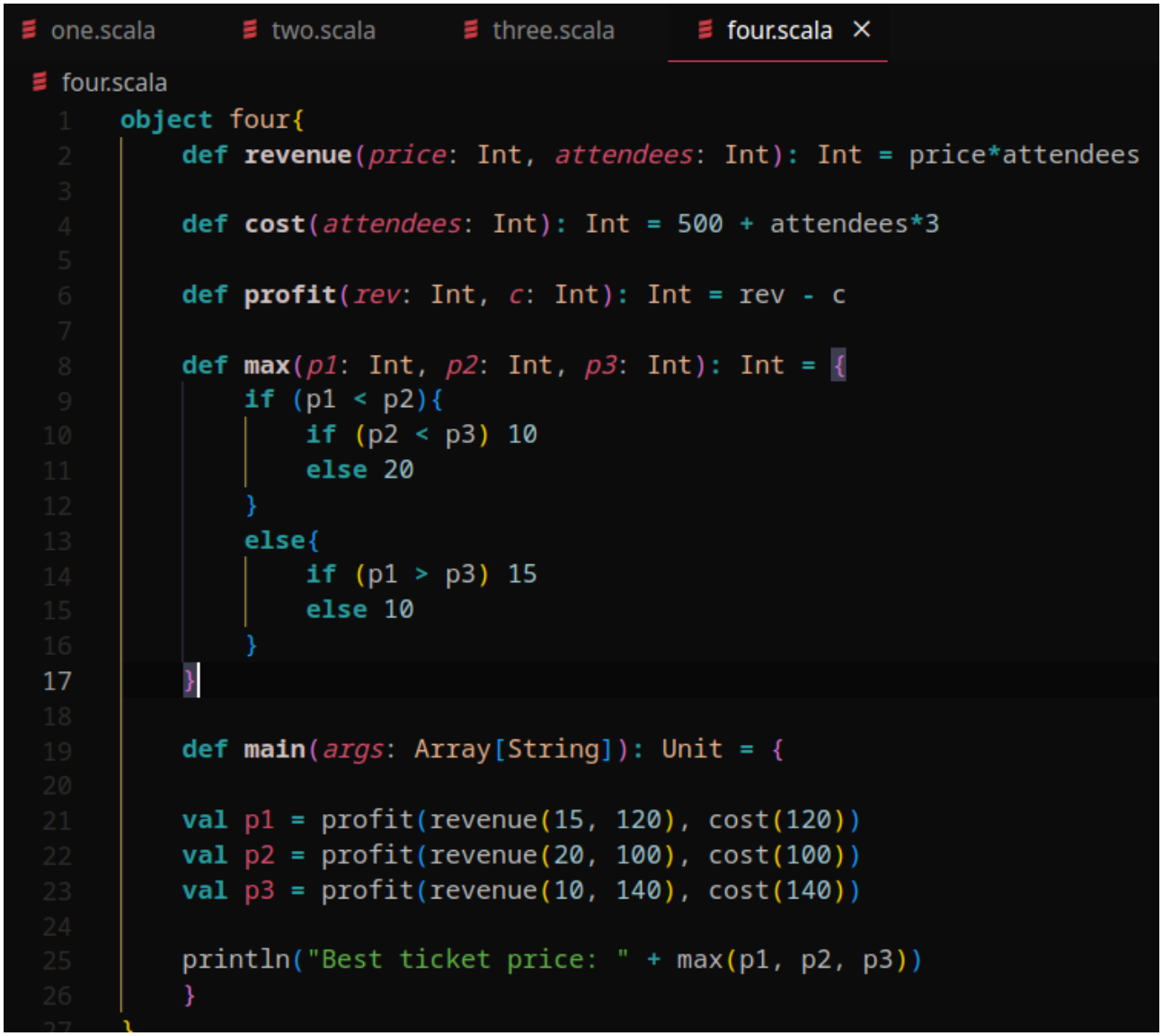

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