

Practical 01 – 22001212

Code:

```
Practical 01 - 22001212 > 22001212_practical_1.scala > {} prc1_22001212
1 package prc1_22001212
2
3 object demo {
4   def main(args:Array[String]): Unit = {
5     //01
6     def area(r:Double):Double={
7       | return r*r*scala.math.Pi;
8     }
9     println("Area of the disk with the radius 5 : "+ area(5));
10
11    //02
12    def tempInFahrenheit(c:Double):Double={
13      | return c*1.8000+32.00;
14    }
15    println("35 celcius in to fahrenheit : "+ tempInFahrenheit(35));
16
17    //03
18    def volume(r:Double):Double={
19      | return (4*scala.math.Pi*r*r*r)/3;
20    }
21    println("The volume of a sphere with radius 5 : "+ volume(5));
22
23    //04
24    def wholeSaleCost(copies:Int):Double={
25      | var coverPrice=24.95*copies;
26      | var discountPrice= coverPrice-(coverPrice*40/100);
27      | var shippingCost=0.0;
28      | if(copies<50){
29      |   | shippingCost=copies*3;
30      | }
31      | else{
32      |   | shippingCost=50*3+(copies-50)*0.75
33      | }
```

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33     }
34     return discountPrice+shippingCost;
35 }
36 println("Whole sale cost for 60 copies : "+ wholeSaleCost(60));
37
38 //05
39 def runningTime(easyPace:Int,tempo:Int):Double={
40     return (2*easyPace)+(3*tempo)+(2*easyPace);
41 }
42 println("Total running time : "+ runningTime(8,7) + "minutes");
43 }
44 }
45

```

Output:

```

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18362.1256]
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C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 01\Practical 01 - 22001212>scalac 22001212_practical_1.scala

C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 01\Practical 01 - 22001212>scala 22001212_practical_1.scala
Area of the disk with the radius 5 : 78.53981633974483
35 celcius in to fahrenheit : 95.0
The volume of a sphere with radius 5 : 523.5987755982989
Whole sale cost for 60 copies : 1055.7
Total running time : 53.0minutes

C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 01\Practical 01 - 22001212>

```