

SCS 2204 - Functional Programming

Scala Tutorial – 3

Write Scala functions to solve the following problems.

1. Area of a disk with radius r is πr^2 . What is the area of a disk with radius 5?

2. The temperature is 35C; convert this temperature into Fahrenheit.

$$^{\circ}\text{F} = ^{\circ}\text{C} * 1.8000 + 32.00$$

3. The volume of a sphere with radius r is $\frac{4}{3} \pi r^3$. What is the volume of a sphere with radius 5?

4. Suppose the cover price of a book is Rs. 24.95, but bookstores get a 40% discount. Shipping costs Rs. 3 for the first 50 copies and 75 cents for each additional copy. What is the total wholesale cost for 60 copies?

5. I run 2 km at an easy pace (8 min per km), then 3 km at Tempo (7 min per km) and 2 km at easy pace again to reach home. What is the total running time?