SCS 2204
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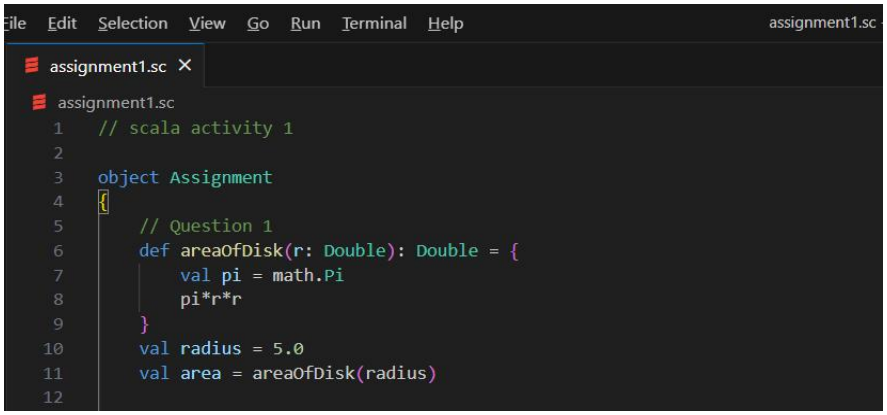
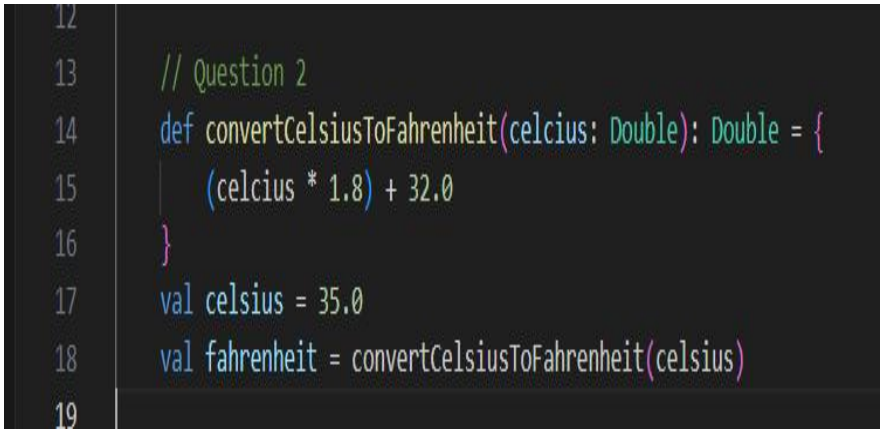
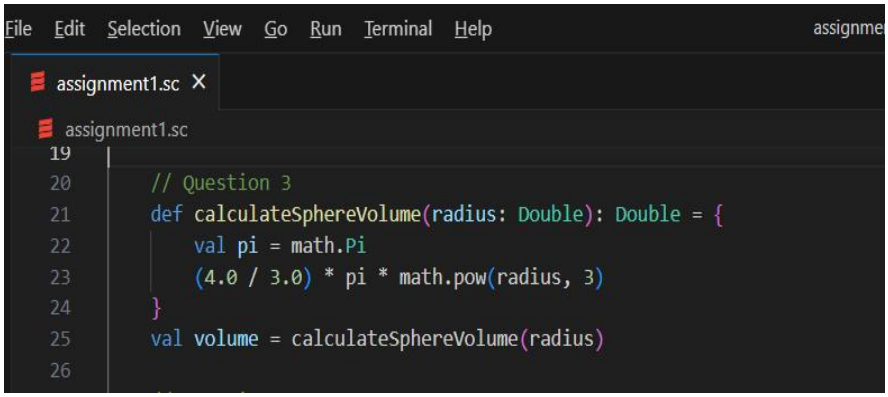
Q1)



Q2)



Q3)



Q4)

```scala
// Question 3
def calculateSphereVolume(radius: Double): Double = {
    val pi = math.Pi
    (4.0 / 3.0) * pi * math.pow(radius, 3)
}
val volume = calculateSphereVolume(radius)

// Question 4
def calculateWholesaleCost(radius: Double): Double = {
    val coverPrice = 24.95
    val discount = 0.4
    val shippingCostFirst50 = 3.0
    val shippingCostAdditional = 0.75

    val discountedPrice = coverPrice * (1 - discount)
    val shippingCost = if (numCopies <= 50) shippingCostFirst50 else shippingCostFirst50 + (numCopies - 50) * shippingCostAdditional
    val totalCost = discountedPrice * numCopies + shippingCost

    totalCost
}
val numCopies = 60
val totalWholesaleCost = calculateWholesaleCost(numCopies)
```

Q5)

```scala
// Question 5
def calculateRunningTime(easyPace: Double, tempoPace: Double, distances: List[Double]) : Double = {
    val easyPaceTime = easyPace * distances(0)
    val tempoTime = tempoPace * distances(1)
    val totalTime = easyPaceTime + tempoTime + easyPaceTime

    totalTime
}
val easyPace = 8.0
val tempoPace = 7.0
val distances = List(2.0, 3.0)
val totalRunningTime = calculateRunningTime(easyPace, tempoPace, distances)
```

Main func.

```scala
def main(args: Array[String]) : Unit =
{
    printf(f"The area of disk is ${area}%2.2f\n")
    println(s"The temperature $celsius°C is equal to $fahrenheit°F")
    printf(f"The volume of a sphere with radius $radius is $volume%2.2f\n")
    printf(f"The total wholesale cost for $numCopies copies is Rs. $totalWholesaleCost%2.2f\n")
    println(s"The total running time is $totalRunningTime minutes")
}
}
```

Question results)

```
C:\ltp_code\scala_assignments>scalac assignment1.sc

C:\ltp_code\scala_assignments>scala Assignment
The area of disk is 78.54
The temperature 35.0°C is equal to 95.0°F
The volume of a sphere with radius 5.0 is 523.60
The total wholesale cost for 60 copies is Rs. 908.70
The total running time is 53.0 minutes
```