```
import org.apache.spark.sql.SparkSession
import org.apache.spark.sql.functions.
object Class21Task {
  case class sportsDataClass(firstname: String,lastname: String ,sports:
String , medal type: String , age: Int , year: Int , country: String)
  def main(args: Array[String]): Unit = {
    val sparkSession =
SparkSession.builder.master("local").appName("spark session
example").getOrCreate()
    val sparkContext = sparkSession.sparkContext
    import sparkSession.implicits.
    val sportsData = sparkContext.textFile("F:\\PDF
Architect\\Sports data.txt").map( .split(","))
                        .map(x \Rightarrow sportsDataClass(x(0), x(1),
x(2), x(3), x(4).toInt, x(5).toInt, x(6))
    val sportsDataDF =
                        sportsData.toDF()
    sportsDataDF.createOrReplaceTempView("Sports Data")
    sportsDataDF.show()
    val usaSilver = sportsDataDF.filter("medal type = 'silver' and
country = 'USA'")
    usaSilver.show()
    println("Total number of silver medals won by USA is : " +
usaSilver.count())
          val goldmedal = sportsDataDF.filter("medal type = 'gold'")
        val goldCount = goldmedal.groupBy("year").count()
        goldCount.show()
        println( "Total number of gold medals is : "
+goldmedal.count())*/
      val usaSilver = sportsDataDF.filter("medal type = 'silver' and
country = 'USA'")
    usaSilver.show()
    println("Total number of silver medals won by USA is : " +
usaSilver.count()) */
/*val Name = udf((First Name: String, Last Name: String) =>
"Mr.".concat(First Name.substring(0,2).concat(" ").concat(Last Name)))
    sportsDataDF.withColumn("Concat First Last", Name(
$"firstname", $"lastname"))
      .select("Concat First Last", "sports", "medal type",
"age", "year", "country") .show()*/
      def Rank( Age:Int, Medal: String):String= (Age, Medal) match{
      case( Age, Medal) if Medal == "gold" && Age >= 32 => "pro"
      case( Age, Medal) if Medal == "gold" && Age <= 31 => "amateur"
      case( Age, Medal) if Medal == "silver" && Age >= 32 => "expert"
      case( Age, Medal) if Medal == "silver" && Age <= 31 => "rookie"
      case => " "
    val Ranks = udf( Rank( :Int, :String))
```