Qinyun Lin – SEC01 (NUID 001582464)
Big Data System Engineering with Scala
Spring 2022
Assignment No. 3

Task

1. Implement parse, element and Rating.apply functions in Movie.scala
2. Complete Ingest test for Int

Solution

1. Implement parse, element and Rating.apply functions in Movie.scala

```scala
def parse(w: String): Try[Movie] = {
  val ws: Seq[String] = w.split( regex = ",")
  Try(Movie.apply(ws))
}
```

```scala
def elements(list: Seq[String], indices: Int*): List[String] = {
  // Hint: form a new list which is consisted by the elements in list in position indices.
  // Int* means array of Int.
  // 6 points
  (for(pos <- indices; if list(pos) != "") yield list(pos)).toList
}
```

```scala
def apply(s: String): Rating = (for (ws <- rRating.unapplySeq(s)) yield for (w <- ws) yield Option(w))
match {
  case Some(Seq(Some(code), _, Some(age))) => Rating(code, Some(age.toInt))
  case Some(Seq(Some(code), None, None)) => Rating(code, None)
  case x => throw ParseException(s"parse error in Rating: $s (parsed as $x)")
}
```
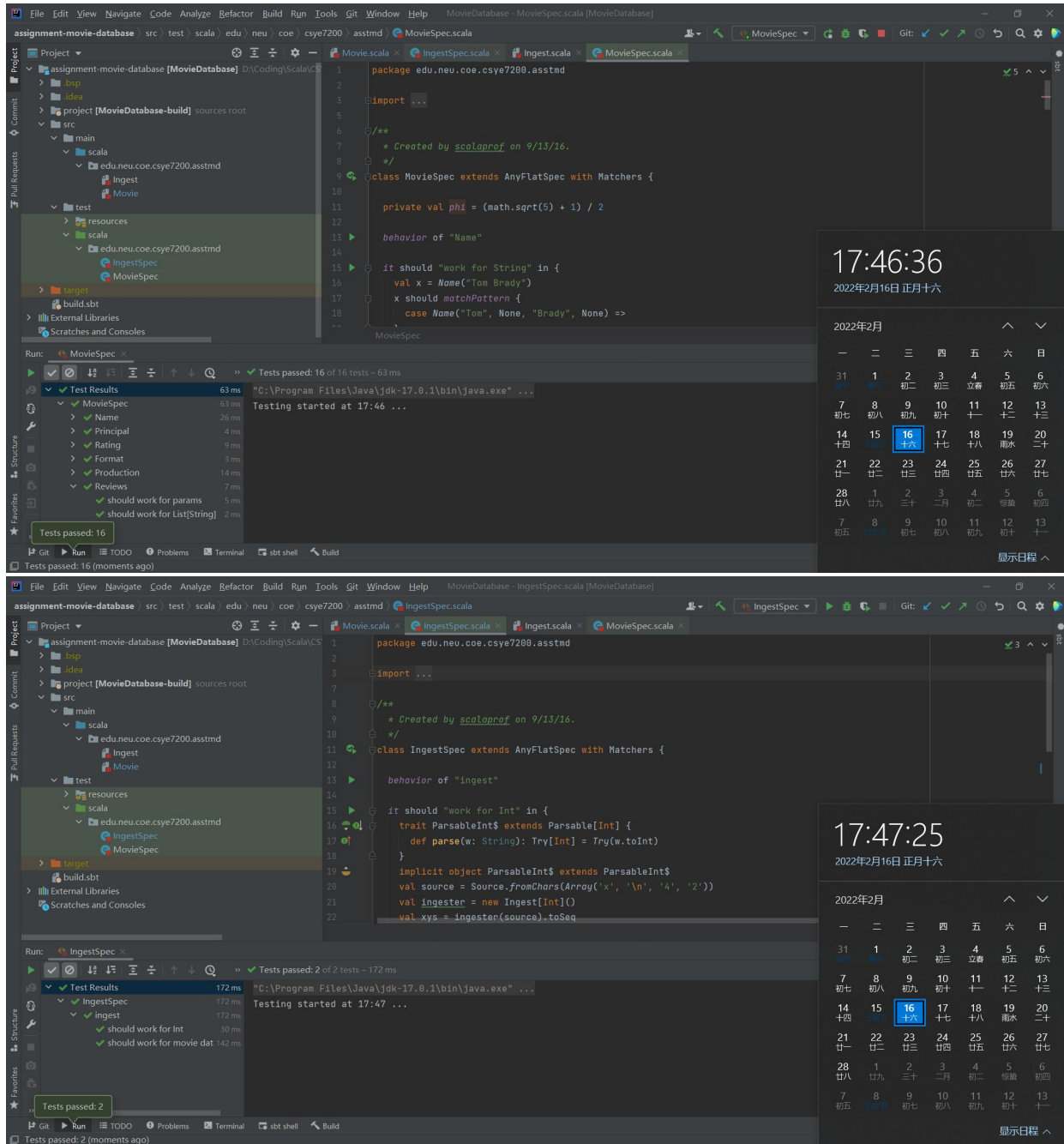
2. Complete Ingest test for Int

```scala
behavior of "ingest"

it should "work for Int" in {
  trait ParsableInt$ extends Parsable[Int] {
    def parse(w: String): Try[Int] = Try(w.toInt)
  }
  implicit object ParsableInt$ extends ParsableInt$
  val source = Source.fromChars(Array('x', '\n', '4', '2'))
  val ingester = new Ingest[Int]()
  val xys = ingester(source).toSeq
  // check that xys has exactly one element, consisting of Success(42) -- 10 points
  // TO BE IMPLEMENTED
  xys.head should matchPattern{
    case Success(42) =>
  }
}
```

Unit Test Screenshot

Project Source

https://github.com/MrNiro/CSYE7200/tree/Spring2022/assignment-movie-database/src/main/scala/edu/neu/coe/csye7200/asstmd