

- 结果:

```
( "destination": "郑州市", 110)
("destination": "西宁市", 111)
("destination": "肇庆市", 191)
("destination": "汕头市", 150)
("destination": "达州市", 164)
("destination": "株洲市", 138)
("destination": "肇庆市", 192)
("destination": "贵阳市", 160)
("destination": "贵阳市", 161)
("destination": "贵阳市", 162)
("destination": "石家庄市", 198)
("destination": "达州市", 165)
("destination": "北京市", 135)
("destination": "南昌市", 144)
("destination": "乌鲁木齐市", 192)
```

实操3

- 主文件: hw/expand3.scala
- 分析: 获取文件后写入kafka,

```
// 创建连接
classOf[com.mysql.jdbc.Driver]
connection = DriverManager.getConnection(url, username, password)
val statement = connection.createStatement()
val resultSet = statement.executeQuery( sql = "SELECT number, name, age from student")
while (resultSet.next()){
    val number = resultSet.getString( columnLabel = "number")
    val name = resultSet.getString( columnLabel = "name")
    val age = resultSet.getString( columnLabel = "age")
    result.append(s"$number, $name, $age")
}
result
```

```
expand3 x
"C:\Program Files\Java\jdk1.8.0_251\bin\java.exe" ...
log4j:WARN No appenders could be found for logger (org.
log4j:WARN Please initialize the log4j system properly.
log4j:WARN See http://logging.apache.org/log4j/1.2/faq.
开始生产数据: 123,Amy,16
开始生产数据: 124,Bob,15
开始生产数据: 127,Cici,17

Process finished with exit code 0
```

实操4

- 主文件: hw/expand4.scala
- 分析: 在运行目录下创建salary.txt文件存放数据, 并提前在数据库中新建一张salary表, 用于存放数据。通过Flink读取txt中的数据, 传输到数据库中。查看数据库, salary.txt中的数据已经录入表中。
- 代码及结果:

```
// 初始化, 创建连接和预编译语句
override def open(parameters: Configuration): Unit = {
  super.open(parameters)
  conn = DriverManager.getConnection( url = "jdbc:mysql://localhost:3306/ziyisql", user = "root", password =
  insertStmt = conn.prepareStatement( sql = "INSERT INTO salary_table (name, salary) VALUES (?,?)" )
  updateStmt = conn.prepareStatement( sql = "UPDATE salary_table SET salary = ? WHERE name = ?" )
}
// 数据源
val dataStream: DataStream[String] = env.readTextFile( filePath = "C:\\Users\\86733\\IdeaProjec

val stream = dataStream.map(data => {
  val splitted = data.split( regex = " " )
  SensorReading(splitted(0).trim.toString, splitted(1).trim.toLong, splitted(2).trim.toDouble)
})

stream.addSink( new JDBC Sink() )
```

开始事务 文本 筛选 排		
	name	salary
▶	a	1000000
	b	1000000
	c	1000000
	d	1000000
○	e	1000000
	f	1000000
	g	1000000
	h	1000000
	i	1000000
	j	1000000

实操5

- 主文件: hw/expand5.scala
- 分析: 控制台输入user名字, 完成关键词输入。
- 结果:

```
C:\Program Files\Java\jdk1.8.0_251\bin\java.exe ...
请输入user:
user
log4j:WARN No appenders could be found for logger (org.apache.flink.streaming.connectors.kafka.FlinkKafkaConsumer09).
log4j:WARN Please initialize the log4j system properly.
log4j:WARN See http://logging.apache.org/log4j/1.2/faq.html#noconfig for more info.
("2019-05-02 20:05:54.0",{"value":{"buy_time":"2019-05-02 20:05:54.0","buy_address":"茂名市环市东路368号","origin":"茂名市"
("2019-07-13 19:53:26.0",{"value":{"found_time":"2019-07-13 19:53:26.0","number":"5","found_address":"上海市虹口区先烈南路2
("2020-03-20 20:34:13.0",{"value":{"buy_time":"2020-03-20 20:34:13.0","buy_address":"广州市南站","origin":"广州市","destin
("2020-03-20 20:34:13.0",{"value":{"buy_time":"2020-03-20 20:34:13.0","buy_address":"广州市南站","origin":"广州市","destin
```