

# Flink cep notFollowedBy 用法案例

notFollowedBy 意思是只保留第一个条件最后的一条数据跟第二个条件去匹配

notNext()

notFollowedBy() 后面的模式不命中（严格/非严格）

下图代码说明的就是，匹配最后一个 name = '2', 接下来遇到 '0' 就是匹配结果，所有会有2个结果

(Event(A,a3,2),Event(A,a6,0))

(-Event(A,a8,2),Event(A,a10,0))

```
1 package com.coder.flink.restart
2
3 import org.apache.flink.cep.scala.{CEP, PatternStream}
4 import org.apache.flink.cep.scala.pattern.Pattern
5 import org.apache.flink.streaming.api.scala.{DataStream, StreamExecutionEnvironment}
6 import org.apache.flink.streaming.api.scala._
7 import scala.collection.Map
8
9 object demo1 {
10   case class Event(types: String, temp: String, name: String)
11
12   def main(args: Array[String]): Unit = {
13
14     val env = StreamExecutionEnvironment.getExecutionEnvironment
15     val data: DataStream[Event] = env.fromElements(
16
17       Event("A", "a1", "2"),
18       Event("A", "a2", "2"),
19       Event("A", "a3", "2"),
20       Event("A", "a4", "1"),
21       Event("A", "a5", "1"),
22       Event("A", "a6", "0"),
23       Event("A", "a7", "3"),
24       Event("A", "a8", "2"),
25       Event("A", "a9", "1"),
26       Event("A", "a10", "0")
27     )
28
29     //定义Pattern接口
30     val pattern = Pattern.begin[Event]("start") //指定名称
31       .where(_.name.equals("2"))
32       .notFollowedBy("middle") //接下来的名称
33       .subtype(classOf[Event]) //可以将Event事件转换TempEvent事件
34       .where(_.name.endsWith("2"))
35       .followedBy("last").where(_.name.endsWith("0"))
```

```

36
37     val patternStream: PatternStream[Event] = CEP.pattern(data, pattern)
38
39     //获取触发事件
40     val reslut: DataStream[List[Event]] = patternStream.select((pat: Map[String,
Iterable[Event]]) => {
41         val rs: List[Event] = pat.get("last").get.toList
42         val rs2: List[Event] = pat.get("start").get.toList
43         val aa: Event = rs(0)
44         val aa2: Event = rs2(0)
45         println(aa + "----"+aa2)
46         rs
47     })
48
49
50
51     reslut.print()
52     //    data.print()
53     env.execute()
54 }
55 }

```

输出结果为：

```

Event(A,a6,0)----Event(A,a3,2)
Event(A,a10,0)----Event(A,a8,2)
2> List(Event(A,a10,0))
1> List(Event(A,a6,0))

```