```
/*
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*/
package
com.dataartisans.flinktraining.exercises.datastream_java.process;
com.dataartisans.flinktraining.exercises.datastream java.datatypes.C
onnectedCarEvent;
import
com.dataartisans.flinktraining.exercises.datastream_java.utils.Compa
reByTimestampAscending;
import
com.dataartisans.flinktraining.exercises.datastream java.utils.Conne
ctedCarAssigner;
import org.apache.flink.api.common.functions.MapFunction;
import org.apache.flink.api.common.state.ValueState;
import org.apache.flink.api.common.state.ValueStateDescriptor;
import org.apache.flink.api.common.typeinfo.TypeHint;
import org.apache.flink.api.common.typeinfo.TypeInformation;
import org.apache.flink.api.java.utils.ParameterTool;
import org.apache.flink.configuration.Configuration;
import org.apache.flink.streaming.api.TimeCharacteristic;
import org.apache.flink.streaming.api.TimerService;
import org.apache.flink.streaming.api.datastream.DataStream;
import
org.apache.flink.streaming.api.environment.StreamExecutionEnvironmen
import org.apache.flink.streaming.api.functions.ProcessFunction;
import org.apache.flink.streaming.api.windowing.time.Time;
import org.apache.flink.util.Collector;
import java.util.PriorityQueue;
public class CarEventSort {
        public static void main(String[] args) throws Exception {
                 // read parameters
```

```
ParameterTool params =
ParameterTool.fromArgs(args);
                 String input = params.getRequired("input");
                 // set up streaming execution environment
                 StreamExecutionEnvironment env =
StreamExecutionEnvironment.getExecutionEnvironment();
env.setStreamTimeCharacteristic(TimeCharacteristic.EventTime);
                 // connect to the data file
                 DataStream<String> carData =
env.readTextFile(input);
                 // map to events
                 DataStream<ConnectedCarEvent> events = carData
                                   .map(new MapFunction<String,</pre>
ConnectedCarEvent>() {
                                           @Override
                                           public ConnectedCarEvent
map(String line) throws Exception {
                                                    return
ConnectedCarEvent.fromString(line);
                                           }
                                  })
                                   .assignTimestampsAndWatermarks(new
ConnectedCarAssigner());
                 // sort events
                 events
                                   .keyBy("carId")
                                   .timeWindow(Time.seconds(10),
Time.seconds(5))
                                   .sum("speed")
                                   .print();
                 env.execute("Sort Connected Car Events");
        }
}
```