Task 1 (20%). Implement the Skyline operator

Implement the divide and conquer variant of the Skyline operator (slide #54 of the lecture) for the following query:

```
SELECT SKYLINE(PRICE, AGE)
FROM CAR
```

Datasets:
The data that you will use for this task is car.csv (download from here). The first column corresponds to PRICE values, and the second column corresponds to AGE values.

Questions:
Implement the following three methods with the provided signatures in the provided skeleton (download from here):

a. `ArrayList<Tuple> nlSkyline(ArrayList<Tuple> partition)`
which uses nested loop algorithm for computing the Skyline of the given data. This method must only be used for computing the Skyline of a particular partition of data.

b. `ArrayList<Tuple> mergePartitions(ArrayList<ArrayList<Tuple>> partitions)`
which merges the Skyline of different partitions.

c. `ArrayList<Tuple> dcSkyline(ArrayList<Tuple> inputList, int partitionSize)`
which uses the previous two methods in order to compute the Skyline of the given collection of data by using the given partition size (i.e. the number of elements in a partition).

d. Complete the implementation of the two methods `dominates` and `isIncomparable` in the `Tuple` class.

You are **NOT** allowed to change the signature of these five methods. They will be used to check the correctness of your implementation.
This exercise should be implemented and tested **in Oracle Java** (jdk 7 or jdk 8). You are **not** allowed to use any third-party libraries.

Deliverables:

- Skyline.java