

The proposed solution has the following classes (see /src/ folder):

- Main.java
- Tests.java
- CSVReader.java
- ValueComparator.java

For development I used IntelliJ Idea (student version with Java 8).

To run the application you have to use the function `main(String[] args)` in the `Main.java`

In order to run the tests you can uncomment the lines that you need in `main(String[] args)`:

```
//      //Tests
//      //-----Report 1 -----//
//      Tests.testReport1Generate_BasicSuccess();
//      Tests.testReport1Generate_EmptyFile();
//      Tests.testReport1Generate_noPrivateResults();
//      Tests.testReport1Generate_SmallRealData();
//      //-----Report 2 -----//
//      Tests.testReport2Generate_EmptyFile();
//      Tests.testReport2Generate_TwoRecords();
//      Tests.testReport2Generate_SmallRealData();
//      //-----Report 3 -----//
//      Tests.testReport3Generate_TwoRecords();
//      Tests.testReport3Generate_NoContactForListing();
//      Tests.testReport3Generate_EmptyFiles();
//      Tests.testReport3Generate_SmallRealData();
//      //-----Report 4 -----//
//      Tests.testReport4Generate_EmptyFiles();
//      Tests.testReport4Generate_WrongId();
//      Tests.testReport4Generate_SmallRealData();
```

The result of application should be:

File: C:/Autoscout24Voitenko/CSV/listings.csv was read successfully. Number of records - 301

File: C:/Autoscout24Voitenko/CSV/contacts.csv was read successfully. Number of records - 14096

1 - Average Listing Selling Price per Seller Type

Seller Type	Average in Euro	Number of records
private	€ 26080.0	75
dealer	€ 25037.0	136
other	€ 25318.0	89

2 - Percentual distribution of available cars by Make

Make	Distribution
"Mercedes-Benz"	16.33%
"Toyota"	16.0%
"Audi"	14.0%
"Renault"	14.0%
"Mazda"	13.33%
"VW"	10.33%
"Fiat"	9.0%
"BMW"	7.0%

3 - Average price of the 30% most contacted listings

Average price
€ 24645.71

4 - The Top 5 most contacted listings per Month

Month	Ranking	Listing Id	Total Amount of contacts	Make	Selling Price	Mileage
January	1	1061	21	"Renault"	€ 5641,-	7000 KM
January	2	1132	18	"Mercedes-Benz"	€ 34490,-	7000 KM
January	3	1099	17	"BMW"	€ 5914,-	8500 KM

January	4	1077	17	"Mercedes-Benz"	€ 8007,-	4000 KM
January	5	1285	17	"Fiat"	€ 28621,-	2000 KM
February	1	1271	37	"Mercedes-Benz"	€ 47165,-	6500 KM
February	2	1138	33	"Toyota"	€ 13986,-	8000 KM
February	3	1006	32	"Renault"	€ 47446,-	7500 KM
February	4	1235	32	"Mercedes-Benz"	€ 5847,-	5500 KM
February	5	1258	31	"Mazda"	€ 44776,-	1000 KM
March	1	1061	31	"Renault"	€ 5641,-	7000 KM
March	2	1181	30	"Renault"	€ 8933,-	3500 KM
March	3	1271	29	"Mercedes-Benz"	€ 47165,-	6500 KM
March	4	1258	29	"Mazda"	€ 44776,-	1000 KM
March	5	1235	29	"Mercedes-Benz"	€ 5847,-	5500 KM
April	1	1181	37	"Renault"	€ 8933,-	3500 KM
April	2	1118	33	"Audi"	€ 38382,-	2000 KM
April	3	1006	29	"Renault"	€ 47446,-	7500 KM
April	4	1262	28	"Renault"	€ 43778,-	8000 KM
April	5	1123	28	"VW"	€ 39077,-	7000 KM
May	1	1204	35	"Toyota"	€ 36895,-	3500 KM
May	2	1098	32	"Toyota"	€ 11345,-	3500 KM
May	3	1298	30	"Mazda"	€ 15989,-	6500 KM
May	4	1018	29	"Renault"	€ 33165,-	3000 KM
May	5	1275	27	"Mazda"	€ 15705,-	7000 KM
June	1	1258	18	"Mazda"	€ 44776,-	1000 KM
June	2	1006	15	"Renault"	€ 47446,-	7500 KM
June	3	1037	14	"Fiat"	€ 14940,-	7000 KM
June	4	1271	14	"Mercedes-Benz"	€ 47165,-	6500 KM
June	5	1012	14	"Audi"	€ 10286,-	3000 KM

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