

# REPORT

Organization: Euromonitor, Data Analyst position

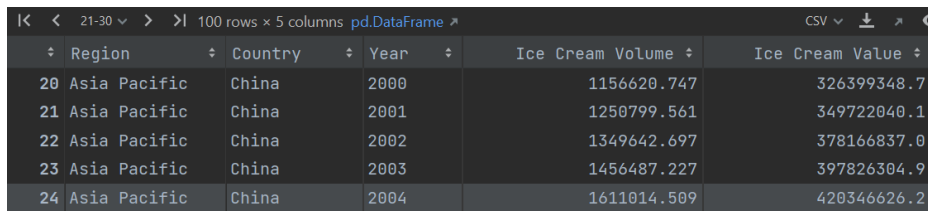
Date: 24.07.2014

## Task 1

During execution, I extracted data, formatted the table by changing columns to cells, replacing NaN values, removing unnecessary columns, renaming values and changing their order, bringing values into a common unit.

Specifically, in this problem, I decided not to apply strategies for applying the mean or median values, because it could effect on searching values results.

New table, comparing to example, you can see below.



Region	Country	Year	Ice Cream Volume	Ice Cream Value
Asia Pacific	China	2000	1156620.747	326399348.7
Asia Pacific	China	2001	1250799.561	349722040.1
Asia Pacific	China	2002	1349642.697	378166837.0
Asia Pacific	China	2003	1456487.227	397826304.9
Asia Pacific	China	2004	1611014.509	420346626.2

Region	Country	Year	Retail Value RSP	Retail Volume
Asia Pacific	China	2001	3497220401	1250799.561
Asia Pacific	China	2002	3781668370	1349642.697
Asia Pacific	China	2003	3978263049	1456487.227

7. The second largest region by Ice-Cream Volume is North America.

8. a) Third largest region by Ice Cream Value is Asia Pacific

b) Tenth largest country by Ice Cream Volume is Iran

c) As I understood, there were no requirements about summing data, so I was comparing single fields. Country that had the second largest Ice Cream Price in 2009 is Norway.

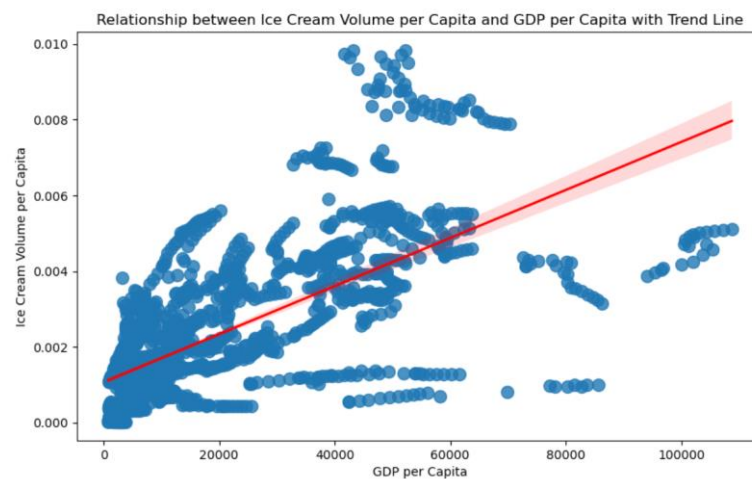
## Task 2

Region	Country	Year	Possession of Refrigerator	GDP	Population
Asia Pacific	Azerbaijan	2000	89.00000	1.748362e+10	8032800
Asia Pacific	Azerbaijan	2001	94.00000	1.921490e+10	8114300
Asia Pacific	Azerbaijan	2002	94.80000	2.102749e+10	8191400

100 rows × 6 columns <a href="#">pd.DataFrame</a>						
	Region	Country	Year	GDP	Pop...	Refrige...
21	Asia Pacific	Azerbaijan	1998	1.465379e+10	7876700...	85.00
22	Asia Pacific	Azerbaijan	1999	1.573763e+10	7953400...	88.00
23	Asia Pacific	Azerbaijan	2000	1.748362e+10	8032800...	89.00
24	Asia Pacific	Azerbaijan	2001	1.921490e+10	8114300...	94.00
25	Asia Pacific	Azerbaijan	2002	2.102749e+10	8191400...	94.80
26	Asia Pacific	Azerbaijan	2003	2.317461e+10	8269200...	95.20
27	Asia Pacific	Azerbaijan	2004	2.531940e+10	8349100...	95.55
28	Asia Pacific	Azerbaijan	2005	3.239876e+10	8447400...	95.79

### Task 3

3. We could avoid the step of joining by year if both tables were filtered upon loading. You can also do this using an inner join.



Here we see a direct linear independence. The higher the quantity of ice cream, the higher the GDP. We can also note that most of the results correspond to low GDP, i.e. respondents generally do not perform well and have little ability to purchase.