

Recruitment Tasks – Junior Java Programmer

* There are a total of 5 tasks here. Tasks 1-4 should be done in Java. Answers should be provided in a single .zip archive, in one project supplied with pom file if you use external libraries. As an alternative, you can share a link to GitHub where you have uploaded a project with answers.

1. Write an application that downloads only table **Statistics Electricity Imbalance** from <https://www.ote-cr.cz/en/statistics/electricity-imbalance> and store it as a HTML file.

2. Write an application that downloads xls file from <https://www.ote-cr.cz/en/statistics/electricity-imbalance> (bottom of the page – file Imbalances) and prints output to the console. The output should go in the following format:

table header (without units);date (with hour);value

Example:

System Imbalance;19.09.2022 00:00; -1.123

** Note that hours are marked from 1 to 24, so hour 1 is the first hour of a day=00:00 and 24 is the last hour of a day=23:00*

3. Write an application that downloads and prints value for production on O3 (value in circle) from page: <https://www.okg.se/en> The output should look like the example below:

value:1384, time:2022-09-19 17:43

4. Get the text file. Create an application which outputs storm name and maximum sustained wind-speed in knots for each of the storms after 2015 with name ending with A (maximum value from a year)

- Format description: <http://www.nhc.noaa.gov/data/hurdat/hurdat2-format-nencpac.pdf>
- Hurricane tracks file: <http://www.nhc.noaa.gov/data/hurdat/hurdat2-nepac-1949-2016-041317.txt>

5. Using a table below write SQL commands that:
- a) Will join Table 1 with Table 2 on "ID" and "CustomerID"
 - b) Will update the type of the product to corn for client with id=2
 - c) Get the total amount for UK

Table 1: CUSTOMERS

ID	ContactName	City	Country	CountryAmount	Type
1	Schmidt	Frankfurt	Germany	150	Barley
2	Mereux	Paris	France	24	Soybean
3	Petersen	Aarhus	Denmark	89	Cotton
4	Hardy	London	UK	32	Potato
5	Berglund	Lulea	Sweden	78	Cotton
6	Fonda	Manchester	UK	220	Rice
7	McBoatie	London	UK	78	Onion

Table 2: ORDERS

OrderID	CustomerID	OrderDate
10308	1	2011-10-01
10309	2	2011-12-09
10310	4	2011-01-11
10311	5	2011-02-04