

Programmatic Operations Manager - Technical Tests

Thank you for taking part in the recruitment process for the role of Programmatic Operations Manager.

The test consists of three parts. Before you begin, please carefully review **all instructions and all attached materials** to understand the full scope of the tasks. In case you have any questions, feel free to reach out!

1. 30-Minute Task – General Web Knowledge

Only open this section once you have **30 minutes fully reserved**, as the task must be completed within that exact time frame.

You will find it under the link.: <https://adserve.pl/test/>

2. Data Analysis and ETL

A. Data Analysis

You've been given a log containing the following information:

Dimensions:

- ssp_id - unique id of SSP
- Bidlog_status - DSP's response status. Available options:
 1. BID_OK - successful bid
 2. NO_BID - response without bid (zero bid)
 3. TIMEOUT - logged timeout in bid response
 4. NOT_LEGAL - bid response not compliant with publisher spec requirements
- bid_adformat - ad size which is chosen by a DSP from available ad sizes in a bid request
- available_sizes_in_request - set of available ad sizes in bid request

Metrics:

- hits - the amount of logged actions

You are now requested to answer the following questions:

1. What are the top 3 ad sizes available in the publisher's inventory?
2. Which SSP has the highest bid rate (relation between all available auctions vs DSP successful bids), and which SSP has the lowest bid rate?
3. What is the top chosen ad size per each SSP?
4. Which top 3 ad sizes generate the highest opportunity loss?

Additional Info:

- You may use any tools you prefer (Excel functions, Python, SQL, Jupyter/Colab notebooks, etc.) to prepare the report.
- The attached file for this task: "Data Analysis Programmatic Operation Manager".

B. ETL

The task instructions can be found in the PDF file "**ETL Task for Programmatic Operations Manager**".

The following attachments are included to support the task:

- ETL Task for Programmatic Operation Manager
- sales_data
- marketing_campaigns

3. Technical task

The company decided to work on an embeddable Prebid banner, and you are requested to prepare a demo.

Requirements:

- Create a **simple HTML file** containing only a **728x90 RTB House display banner**.
- Include a **fallback image** to be displayed in case there is no bid response.
- The code must be **self-contained** (single HTML file) and **should not rely on any ad servers** for delivery.

When setting up, you can follow our [specification](#) and use fr2TAJpVFTb0Ng54JU8p as the publisherId.