

# Test task

## Part 1 – Main

The product owner wants to change the marketing strategy based on customers' behavior.

1. We need to build a custom purchase funnel based on the tracking data, the funnel will show the customer journey from the moment of visiting the website, and viewing a product or listing, to the moment of purchase. The main marketing funnel steps you can add or define yourself. Your main goal is to find details on every stage of the marketing funnel.
2. The achieved result must be fixed in metrics that, in your view, describe the user behavior on the site.
3. What additional data/information would you need to know the effectiveness of the current strategy?
4. The resulting analytical solution should show how the customer journey varies depending on what `page_type` was visited first in the session.

### Deliverables:

- The achieved result must be presented in form of a report/dashboard with any suitable BI tool.
- Calculations are done in SQL or Python.
- The results of the analysis and the logic of the calculations should be presented to the product team informatively and to be understandable to the entire team, which includes technical and non-technical specialists.

Dataset description:

Filed	Description
event_date	The time the event occurred
session	Session ID
user	User ID
page_type	Type of the page
event_type	Type of the event
product	Product ID

## Part 2 - SQL

1. Write an SQL query that will return a number of clients by day that:
  - only viewed products in their first session;

- added only one product to the basket;
- placed an order within two days time after the first session.

2. Write a query that will return any abnormal (to our view) user behavior. Describe why the behavior is unusual.