

ANALYTICAL EXECUTION (SQL + POWER BI)

The **case_auditoria_fly_safe.xlsx** file contains the following tabs:

- **Purchases** – Invoice data, suppliers, values, and taxes.
- **Payments** – Payment records, approvers, and registrars.
- **Contracts** – Suppliers with active and inactive contracts.
- **Maintenance** – Aircraft maintenance costs and types.
- **Revenue** – Contracted and invoiced values for clients.
- **Users** – Roles and permissions in the system.

1. Develop SQL queries to answer the following questions:

- a) Which payments were approved by the same person who registered them?
- b) Which payments were made to suppliers without an active contract?
- c) Which suppliers are duplicated (same name with different CNPJs – companies' ID number)?
- d) Which invoices have a calculated tax different from the correct tax? Show the value of the differences; rank from the largest difference to the smallest.
- e) What is the quantity and value of preventive and corrective maintenance during the period? Add a comparison of preventive vs. corrective maintenance for quantity and value?
- f) Which revenues were contracted but not fully invoiced? Show the percentage invoiced and the remaining amount to be invoiced.

2. Select at least four indicators from the list above and structure a Power BI dashboard based on the results obtained.

Deliverable: SQL query files and Power BI visuals in PPT.

Suggested tools: SQL Server (SSMS)