The National School of Artificial Intelligence
المدرسة الوطنية العليا للذكاء الاصطناعي

Advanced DataBase Labs
Third Year Semester 6
Lab 6

Intelligent Systems Engineering Department
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Power BI: Installation, Configuration, and Loading Data

Business Intelligence (BI), Data Warehousing, and Power BI are closely related components in the realm of data analytics and decision support. Collectively, BI, Data Warehousing, and Power BI are forming a complete framework for controlling the potential of data to drive business growth and innovation. Therefore, organizations can gain valuable insights, improve decision-making processes, and stay ahead in today's competitive business world.

1 Useful Notions & Syntaxes

(a) Introduction to PowerBI

   i) *Microsoft PowerBI* is a wide reporting solution that offers data preparation, data visualization, distribution, and management through *development tools* and an *online platform*;

   ii) There are three elements to *PowerBI*:*PowerBI Desktop* (A free desktop application for data analysts and other report creators), *PowerBI service* (An online platform to organize, manage, and distribute reports), **PowerBI Mobile (cross-platform mobile app)**;

   iii) We can create *visualization (visual)*, and *dashboards* by adding canvas and tiles.

   iv) We can upload data into *PowerBI* under several forms(Get Data: Local file,SQL server, website,...), and formats (CSV, XLSX,...);

2 Lab Work

   i) Install **PowerBI**, using the following link:https://powerbi.microsoft.com/en-us/desktop/.

   ii) Open and try to explore **PowerBI**. **Explain your experience**.

   iii) Upload the data from both databases. View and explore data using the tools in **PowerBI**. **What do you notice regarding the data?**

3 Homework

By the end of each Lab, a report should be done, that contains all the details of the elaborate work during the Lab session. The report is going to be submitted later on. **You can work in groups of three maximum**.