Part 1

1. Open a Python project

2. Install YOLOv8- trained model

3. Run a code snippet to detect objects on several images and save them in the results folder

Summary:

I used a Google search for installation commands, then wrote a short code snippet with YOLO, ran it a few times with different images to see that it works well and detects objects in images.

I had some errors in the installations but they didn't interfere with the project running.

Part 2

1. Install llama-cpp-python pdfminer.six
2. Search a full construction specification document

Summary:
I wasn't able to understand exactly what was required of me, I didn't get to deal with LLM, I don't shy away from learning new things - on the contrary, I love challenges :) But I had a hard time completing the task without AI...which is what I usually do when I encounter new materials**.**

Part 3
Building a Dockerfile:
1. I chose a basic image: python:3.10-slim to reduce the image size
2. I installed the necessary tools to run models
3. I installed the libraries needed to run both tasks in Python
4. I copied all the necessary files into the image
5. I set WORKDIR to /app so that all runs and file calls would be consistent
6. I added a pre-download step of the YOLOv8n model so that the container would be immediately ready to run.
7. In CMD I defined the main.py script that runs all the tasks

Summary:
To build and run the project end-to-end, clone the repository and run in terminal:

docker build -t midai .
docker run --rm -v $(pwd)/results:/app/results midai