Please read, understand, and adhere to instructions.

This assignment aims to evaluate your Python skills, focusing on string formatting, loops, collections, and file handling for text, Word, and Excel files. By addressing a real-world scenario, you'll enhance your understanding and proficiency in Python programming.

**Scenario:**

Ball Mart, our company, issues Word file invoices to customers who make online orders.

Recent complaints indicate that some customers are not receiving their invoices in Word format.

After a thorough investigation, we identified a glitch in the invoiceEmail class module, specifically ignoring transactions with transaction IDs containing "H1".

This bug was introduced to the code base on 20XX-XX-XX.

You have received a JSON file containing all transactions after this date. Your task is to identify transactions with "H1" in their IDs and generate Word (.docx) invoices using the python-docx library, adhering to the provided sample invoice format.

Additionally, you are required to create an Excel report using the openpyxl library, replicating the format of the provided sample invoice.

Please note! Search for "H1" not "1H"

**Rubrics:**

* Well-commented and elaborated code, explaining your steps (0 - 3 marks)
* Use of custom functions (0 - 1 mark)
* Generating Excel report matching the template (0 - 3 marks)
* Generating Word invoices matching the template (0 - 3 marks)
* Reading the JSON file and accessing its content (0 - 3 marks)
* Utilization of Python basic functionalities (1 - 2 marks)

**Testing Procedure:**

1. Download all student's zip files and extract them into a folder.
2. Open your folder and delete all files except main.py, curstomer\_dataset.json, and logo.png.
3. Run your main.py. It should perform all processes and save the invoices and Excel report in the same folder.
4. Do not create multiple Python files; work on only one PY file.

**Upload Instructions:**

* After thorough testing, upload your work.
* Pack your main.py, curstomer\_dataset.json, and programmatically generated docx, Excel file, and logo image, and fill & sign the "Academic Integrity Pledge.pdf" files into a .zip file and upload.
* No other files or formats are allowed.

**Important Instructions:**

* Download the provided boilerplate project and adhere to the file names and content.
* Write your Name, Student ID, and Email Address as a multiline comment at the top of the Python file.
* Ensure your code works without errors. You will receive only 1 mark if your file fails to work or throws an error.
* Avoid hardcoding file paths.
* Do not seek help from any individual, copy code from someone, or use AI code generators.
* Restrict usage of the specified packages and their dependencies. You may use JSON, OS, and math packages if required. Numpy and pandas are not allowed.
* Do not alter the content of curstomer\_dataset.json to manipulate results.
* Without the filled & signed "Academic Integrity Pledge.pdf" file, I will not evaluate your assignment. You will receive zero marks.