Final Exam

Program Requirements (70 Points):

1. **Objective**: (40 points)
    - Design a Python program that reads the attached file and processes numeric data.
    - The program should perform the following tasks:
        i. Validate that the file exists.
        ii. Store the numbers from the file in a list.
        iii. Display the following results:
            1. **Total**: Sum of all numbers (e.g., 1200).
            2. **Maximum**: Largest number (e.g., 300).
            3. **Average**: Mean of the numbers (e.g., 200).
            4. **Unique Numbers**: A list of distinct numbers (e.g., [100, 200, 300]).
            5. **Numbers Greater than 200**: All numbers exceeding 200 (e.g., [300]).
2. **Constraints**: (30 points)
    - **Do not use any user-defined functions** (e.g., def is not allowed).
    - **Do not use the os module** for file validation.
    - **Do not use with open()** to open the file.
    - **Do not use list comprehensions** (e.g., [x for x in ...]).
    - **Do not check for non-numeric data** in the file. Assume all data is valid.
3. **Calculations**:
    - Focus on correctly calculating and displaying:
        - The total, maximum, average, unique numbers, and numbers greater than 200.
4. **Submission**:
    - Upload only the Python program file.
    - You **do not need to submit an output screenshot**.
    - If you run out of time, upload the file in the Dropbox within 30 minutes of finishing. The dropbox is always open but I will check the timestamp.
5. **Resources**:
    - You can use any resources available to help you write the program.

Sample output – the second output shows when the file does not exist .

```
>>>
= RESTART: C:\Users\npatnayakuni\OneDrive - Calhoun Community College\Desktop\Py
thonFall22\exams\final\Finalexam.py
Total of the numbers is: 1,200.00
The maximum number is: 300.00
The number greater than 200 is: 300.00
The average of the numbers is: 200.00
The unique numbers in file are
100 200 300
>>>
```

```
>>>
= RESTART: C:\Users\npatnayakuni\OneDrive - Calhoun Community College\Desktop\Py
thonFall22\exams\final\Finalexam.py
the file is not found
>>>
```