For part 2 of the current phase (phase 3), we expect the following things

ASSUMPTIONS

1. Integer only data
2. Operated on Tables (single page) [NOT FOR MATRICES]

HOW TO PROCEED

1. Implement an update command in the given db
2. This update command is of the type, where you update a full column at a time. For instance
    a. UPDATE <table_name> COLUMN <column_name> <OPERATOR> <value>
    b. Examples include
    UPDATE EMPLOYEE COLUMN Ssn MULTIPLY 5
    Expected Behaviour of this command is each value in the column “Ssn” in the “EMPLOYEE” Table will be multiplied by the value 5
    c. <OPERATOR> can take values MULTIPLY, ADD, SUBTRACT
3. Make a Theoretical Analysis of what operations are conflicting among these
    a. Two Simultaneous Reads on a table
    b. One Read and One Write happening simultaneously on a table
    c. Two Simultaneous Writes on a table
4. To do Operations simultaneously, you can run two instances of your server in two different terminal windows.
5. Implement a mechanism to handle the conflicting operations (decided in 3rd point)
6. This mechanism is up to you to decide
7. Final submission of this part comprises of
    a. PDF Document : Write your analysis, learnings and your approach for the problem
    b. Video Submission:
        i. Attach its link in the PDF Document itself
        ii. In the video you are expected to show conflicting operations happening at the same time which abide by the ACID Properties
        iii. There may be a doubt about how you will show simultaneously as the operations can happen in the blink of an eye so to handle that you can add sleep commands or some other technique you may want to use.
8. Part 2 is more approach based, so don’t overthink and start as mentioned above.

REFERENCES

1. Read about “LOST UPDATE PROBLEM”
2. Read about ACID Properties