Assignment 3

This is an individual assignment. You may discuss assignment details with your colleagues, but your work and submitted materials must be your own.

Make sure you understand the academic policies and procedures as detailed at: http://www.georgianc.on.ca/admissions/policies-procedures/academic-misconduct

Pay special attention to warnings about cheating, plagiarism, and acceptable use of college computer resources.

If your submitted work is found out to have been re-produced from any human or non-human resource (for example, the web), I will strictly be following the procedure as in the above document.

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Write a COBOL program that works on SPICE for this assignment.

**Write a COBOL program to update or delete records in a master sequential file in place, using a transaction file. There can exist none, one or multiple transaction record(s) for a master record.**

Assignment3.zip contains the data files - master.dat (master sequential file) and trans.dat (transaction file) and an incomplete COBOL program assignment3.cbl that describes the record structure of the two files. Please use the data files as is and use the respective names in the ASSIGN clause for the two files.

The programs available on the school drive “H:\achawla\COBOL2013\Friday\sequential file updates-week12” will be a big help for this assignment.

You are required to either update or delete records in the master file. The T-CODE in the transaction record determines if an update or a delete is required.

Updating a master record is achieved by adding the amount T-AMOUNT from the transaction record to the master amount field M-AMOUNT.

Deletion is achieved by moving ‘N’ to the ACTIVE field in the master record. Hence all records in the master file are active to begin with since they have a value of ‘Y’ in the ACTIVE field.

After completing the process, move all the active records, the ones that are not marked for deletion (ACTIVE = ‘Y’) to a new master file. You MAY need to close the master file and reopen it again in the correct mode before reading all the records and moving them to the new master file. There are other ways to go back to the first record too if you want to research a little.

Notes:

1. Both files are sorted by the account numbers, T-ACCT-NO AND M-ACCT-NO respectively.
2. There can be none, one or multiple transaction records for a single master record.
3. If a transaction record exists such that there is no corresponding master record for it, display a meaningful error message, showing the erroneous transaction record key too in the message.
4. For a transaction record with a corresponding master record, update or delete the master record depending on the T-CODE. An error message is to be displayed if the T-CODE is not ‘U’ OR ‘D’, showing the T-ACCT-KEY too.

Marking Scheme

|  |  |
| --- | --- |
| Requirement | Marks allotted |
| Program executes correctly and completely as per requirements with no errors  and makes the required changes in the master file | 15 |
| New master file entries have been added in the required divisions/sections. Include ‘Record Contains…’ clause for this file | 5 |
| New master file consisting of active records is created | 5 |
| Error messages, as required, appear in case of invalid transaction account number or invalid transaction code. | 2 |
|  |  |
| Code is commented- your name, date and purpose at head; each paragraph has an accompanying comment stating its purpose | 4 |
| Code is easily readable and is indented properly | 2 |
| Files are closed | 2 |
|  |  |
| Total | 35 |

**How to submit**: Use the Assignment 3 link on blackboard to submit your COBOL code file ONLY and name it **Assignment2 *yourname*.cbl**. Two submissions are allowed just in case you want to make any last minute adjustments.