### cs370 program 4 FALL 2021

### Tyson Bennett of Bennett Shoes has purchased four candy warehouses. Each warehouse purchases candy supplies from 6 different Vendors and sells to small shops and schools for promotions in Alabama. He plans to continue to sell to the small shops and schools in Alabama as well as sell candy in his shoes stores and give candy away as promotional items for his shoes at local events.

### 1. Sort each UNSORTED file in ASCENDING ORDER based on WAREHOUSE ID, VENDOR ID AND CANDY ID.

### 2. Merge all four SORTED files into one file in ASCENDING ORDER based on WAREHOUSE ID, VENDOR ID AND CANDY ID.

### 3. Provide a detailed inventory report of the candy. SEE PRINTER SPACING CHART

### 4. Since the files contain errors and missing data, you will need to do error handling when writing the report.

All 4 INPUT FILES ARE THE INPUT FILES YOU CREATED FROM PROGRAM 3:

ALL INPUT FILES HAVE THE SAME LAYOUT:

**143-character record** on disk (view in landscape with a very small font)

NEW-INV-FILE-B100.TXT

|  |  |  |  |
| --- | --- | --- | --- |
| CC | FIELD |  | RESTRICTIONS |
| 1-4 | Warehouse | AN | B100 |
| 5 | Vender ID | A | (A-Atomic Sweets, B - Boston Sweets, N-Nellies Sweet Shop, T-Tiger Treats, U-Unity Candy, X-Xtra Candies) |
| 6-8 | Candy ID | AN | C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10 |
| 9-143 | Candy Data Array (maximum of 5 Array Elements) |  | Candy Name X (15) |
| Candy Box Size A ( L – Large, M – Medium,  S-Small, F – Fundraiser,  X – Sample) |
| Candy Type AA (SF – Sugar Free, SU – Sugar) |
| Number of cases in stock 9(4) |
| Case Purchase price 999v99 |

NEW-INV-FILE-B200.TXT

|  |  |  |  |
| --- | --- | --- | --- |
| CC | FIELD |  | RESTRICTIONS |
| 1-4 | Warehouse | AN | B200 |
| 5 | Vender ID | A | (A-Atomic Sweets, B - Boston Sweets, N-Nellies Sweet Shop, T-Tiger Treats, U-Unity Candy, X-Xtra Candies) |
| 6-8 | Candy ID | AN | C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10 |
| 9-143 | Candy Data Array (maximum of 5 Array Elements) |  | Candy Name X (15) |
| Candy Box Size A ( L – Large, M – Medium,  S-Small, F – Fundraiser,  X – Sample) |
| Candy Type AA (SF – Sugar Free, SU – Sugar) |
| Number of cases in stock 9(4) |
| Case Purchase price 999v99 |

NEW-INV-FILE-B300.TXT

|  |  |  |  |
| --- | --- | --- | --- |
| CC | FIELD |  | RESTRICTIONS |
| 1-4 | Warehouse | AN | B300 |
| 5 | Vender ID | A | (A-Atomic Sweets, B - Boston Sweets, N-Nellies Sweet Shop, T-Tiger Treats, U-Unity Candy, X-Xtra Candies) |
| 6-8 | Candy ID | AN | C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10 |
| 9-143 | Candy Data Array (maximum of 5 Array Elements) |  | Candy Name X (15) |
| Candy Box Size A ( L – Large, M – Medium,  S-Small, F – Fundraiser,  X – Sample) |
| Candy Type AA (SF – Sugar Free, SU – Sugar) |
| Number of cases in stock 9(4) |
| Case Purchase price 999v99 |

NEW-INV-FILE-B400.TXT

|  |  |  |  |
| --- | --- | --- | --- |
| CC | FIELD |  | RESTRICTIONS |
| 1-4 | Warehouse | AN | B400 |
| 5 | Vender ID | A | (A-Atomic Sweets, B - Boston Sweets, N-Nellies Sweet Shop, T-Tiger Treats, U-Unity Candy, X-Xtra Candies) |
| 6-8 | Candy ID | AN | C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10 |
| 9-143 | Candy Data Array (maximum of 5 Array Elements) |  | Candy Name X (15) |
| Candy Box Size A ( L – Large, M – Medium,  S-Small, F – Fundraiser,  X – Sample) |
| Candy Type AA (SF – Sugar Free, SU – Sugar) |
| Number of cases in stock 9(4) |
| Case Purchase price 999v99 |

MAKE SURE YOU GO BY THE PRINTER SPACING CHART FOR THE REPORT.

1. You will need to SORT the 4 UNSORTED INVENTORY FILES and create 4 SORTED INVENTORY FILES
2. You will need to MERGE the 4 **SORTED** INVENTORY FILES together to create one INVENTORY FILE that will then be opened and used for input to write the inventory report from.
3. The Report is a Multi-Level Control Break. There are 3 breaks with total lines–
   1. Major – Warehouse ID
   2. Intermediate - Vender ID
   3. Minor – Candy ID
4. WAREHOUSE ID - If it is not B100 OR B200 OR B300 OR B400, DON”T process that record, SKIP IT.
5. VENDOR ID - needs to be expanded to use their name. You may use either a Nested If or an Evaluate Statement. If the Vendor ID is not valid or not found enter INVALID VEND CODE into the Vender Name field in both the header and total lines.
6. CANDY NAME - should only print one time for each group. See printer spacing chart.
7. CANDY BOX SIZING - is to be expanded to use the word for the size not the code via an EVALUATE statement. If spaces are found, put NO DATA in the detail size field, if an invalid size code is found, **CONCATENATE** the word **BAD-** with the invalid code.
8. You will need to validate the number of cases in stock and the purchase price before doing any math – HINT you will need temporary variables. Should the data not be numeric (spaces are not numeric), put zeroes in the fields.
9. If the CANDY TYPE is not SU or SF, put an \*\* in the detail field.
10. The incoming record contains an array of up to five Candy Elements. Each Element will have a Candy Name, a Candy Size, a Candy Type, a Number of cases in stock and a Price for each case. Some Elements will be “empty”. In COBOL there is no *EMPTY*. These empty spots contain **spaces**. Validation is necessary.
11. You will need a sub script to work with an array of data.
12. The Detail Line total cost is number in stock \* purchase price
13. Accumulate the Candy Quantity in Stock and the Candy Cost total
14. Accumulate the Vendor Quantity in Stock and the Vendor Cost total
15. Accumulate the Warehouse Quantity in Stock and the Warehouse Cost total
16. Accumulate a Grand Quantity in Stock and Grand Total Cost for all Warehouses
17. Each Warehouse should start on a new page with a new report header
18. Grand total should only print on the very last page after **ALL** Warehouses are done.
19. Be sure to follow the Printer Spacing Chart.

THIS IS A HUGE PROGRAM – DON’T WAIT. START EARLY AND ASK QUESTIONS