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ABSTRACT

This is one of a series of computer modules designed for use by secondary students. This module contains a simulation of a cash register, student instructions and worksheets, and the STORE program and related data programs and subroutines. The module will require one fifty-minute class period per student, spent at the computer. Also included in the module are worksheets, a statement of objectives, and teaching suggestions. (MK)

COMPUTER MODULE FOR USE IN A MATHEMATICS LABORATORY SETTING

STORE
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A Publication of
University of Denver
Mathematics Laboratory
Regional Center for
Pre-College Mathematics

Dr. Ruth I. Hoffman, Director

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The module may be used in the following ways.

1. It may be used by individuals or pairs of students.
2. Individual students who have successfully completed the module may assist other students, especially in handling the computer portions of the module. Thus, this module can be used concurrently with other individual projects.

MATERIALS

Contained in the module:

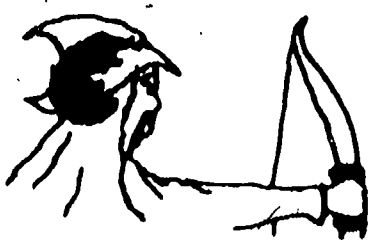
1. Student instructions and worksheets.
2. The STORE program, along with related data programs and subroutines.

Teacher must provide:

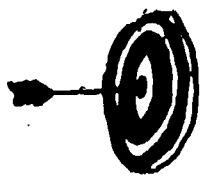
1. Computer access
2. Occasional updates of the program data.

TIME SCHEDULE

It is expected that this module will require one fifty-minute class period per student, spent at the computer. Manual filling-out of the worksheets could be done as homework.



OBJECTIVES



- The student will come into contact with realistic foodstore prices.
- The student will learn some of the procedures of a cash register clerk, such as making change, totalling cash register amounts, etc.
- The student will learn how sales tax for food and non-food items is computed.
- The student will learn some of the procedures of a food store inventory clerk, in keeping track of products and ordering.
- The student will be introduced to the concept of meeting a budget.
- The student will exhibit arithmetic skills in disquised drill.

OVERVIEW

This module is actually a simulation of a cash register. The STORE program does essentially all the things which a cash register does, totalling sales, indicating change, etc. In addition, the program does some things most cash registers don't do: it figures sales tax, keeps track of inventory, etc. There are cash registers, in some of the major department stores, which have already taken over inventory responsibilities; this is probably a trend of the future.

EVALUATION PROCEDURE

No posttest should be required for this module.

The student will turn in his completed worksheets, along with his computer output. He will previously have checked these himself for descrepancies.

The student may be penalized for serious errors in his own calculations, but should not be penalized for errors in using the computer program. If necessary, he should be required to rerun the program. Errors of one cent or so should be regarded as insignificant since they may be attributable to computer round off methods.

OUTLINE

A. The cards #1 - 6 and student worksheets #6a - 6e are virtually self-explanatory.

B. Teaching Suggestions

1. Alert students will want to know why such items as Kleenex appear under both food and non-food headings. This information is authentic. The category of an item in a grocery store is determined by which department of the store orders and stocks the item.

2. The program is written in the Fortran computer language, and format requirements will cause the most trouble in running the program. Fortran is designed for IBM card input, and every space is meaningful. It is essential that a number be in the right space. For this reason, the student is instructed to input item numbers in a four-space field: 3 is 0003 or blank-blank-blank-three; 24 is 0024. If he doesn't do this results will be extremely in error, or even overflow the program, resulting in meaningless output. When an item is purchased by the pound, the number of pounds should be indicated as follows: Item number (four-space field), two spaces, and the decimal equivalent of the number of pounds, always including a decimal point. This is explained in the worksheet instructions, and it must be followed exactly.

(It should be made clear to the students that they need only input, for the program, the item number of the product they are buying and, in the case of products bought by the pound, the number of pounds, according to the format given above.)

This whole area is one in which students who have completed the module can be very helpful to those that follow.

3. In the interest of verisimilitude, the data in the program should be periodically updated, reflecting changes in actual prices. Students could secure revised data as fieldwork; and, optionally, for the last worksheet, students could be sent to an actual supermarket, to see how much they could get for a specified amount of money.

The method of updating the data on the computer will vary from system to system, but on most systems it should present no difficulty.

4. The Student Worksheet #6e may be done in conjunction with a field trip.

Store

Card # 1

This unit will acquaint you with the operation of a grocery store. As a buyer, you will be exposed to purchasing, to buying items which are priced by the pound, and to the difference between the sales tax on food and non-food items. You will see how a sales clerk operates a cash register. You will be exposed to the problems of an inventory clerk - - ordering and stocking. And you will be given a sample exercise in budgeting your grocery expenses.

Store

Card # 2

The next pages contain a list of the items available at "COMPUTER DISCOUNT FOODS". They are divided into four categories: Groceries, Meats, Produce, and Non-Food Items. The sales tax, in Denver, on food items is 3% and on non-foods, it is 6%. Meats and Produce are sold by the pound. (Produce, basically, is fresh fruits and vegetables.)

The information on the next pages is divided into six columns. The first column contains the item number of each commodity. The second indicates whether the item is a grocery, meat, produce, or a non-food item. The third column is the name of the product; the fourth column is its price. The last two columns show the maximum and minimum amounts of each item kept in stock. Thus, for example, potato chips: 90 bags are the most kept in stock; when the number of bags drops below 15, it is time to order some more. If there were only 14 bags left, the stock clerk would order 90-14=76 bags -- that is, enough to bring the total back to 90.

Store

Card # 3

GROCERIES

THE SALES TAX IS 3%

ITM#	DPT	ITEM	PRICE		
4	GR	Campbell's Soup	.23 each	15	5
5	GR	Wonder Bread	.60 each	18	5
6	GR	Sintons 2% Qt.	.73 each	49	9
7	GR	Caravelle	.09 each	94	9
8	GR	Snails Escargot - 12	1.83 each	47	20
9	GR	Canada Dry Gin-ale	.65 each	797	200
10	GR	Milk	.69 each	90	15
11	GR	Potato Chips	.49 each	90	15
12	GR	Cookies	.77 each	90	15
13	GR	Cheddar Cheese	.65 each	90	15
14	GR	Crackers	.77 each	90	15
15	GR	Welch's Jam	.69 each	90	15
16	GR	Del Monte Corn	.29 each	90	15
17	GR	Sigman's Bologna	.29 each	90	15
18	GR	Hostess Twinkies	.16 each	90	15
19	GR	6-Bottle Deposit	.30 each	89	15
20	GR	Bounty	.43 each	98	15
21	GR	Sugan	.59 each	99	15
22	GR	Flour	.43 each	99	15
23	GR	Graham Crackers	.65 each	99	15
24	GR	Cookies	.42 each	99	15
25	GR	Fig Bars	.37 each	99	15
26	GR	Charmin	.43 each	98	15
27	GR	Cake Mix	.30 each	98	15
28	GR	Frosting	.41 each	99	15
29	GR	Corn Oil	.96 each	99	15
30	GR	Pears	.22 each	99	15
31	GR	Mr. Clean	.96 each	99	15
32	GR	Blu-Boy	.79 each	99	15
33	GR	Kunners Ketchup	.27 each	99	15
34	GR	Betty Crkr. Frsting	.41 each	99	15

Store

Card # 4

MEATS

THE SALES TAX IS 3%

35	MT	Hamburger	.90 /lb.	90	15
36	MT	Sirloin Steaks	1.89 /lb.	90	15
37	MT	N.Y. Steak	2.39 /lb.	99	15
38	MT	Top Sirloin	2.59 /lb.	99	15
39	MT	Sirloin	1.69 /lb.	99	15
40	MT	Filet	2.98 /lb.	99	15
41	MT	T-bone	1.89 /lb.	99	15
42	MT	Rd. Steak	1.49 /lb	99	15
43	MT	Rib Eye	2.35 /lb.	99	15
44	MT	Cube Steak	1.49 /lb.	99	15
45	MT	Chicken	.59 /lb.	89	15
46	MT	Turkey	.95 /lb.	99	15
47	MT	Ham Hocks	.89 /lb.	99	15
48	MT	Shank Ham	.89 /lb.	99	15
49	MT	Ham	.98 /lb.	99	15
50	MT	Rib Roast	1.49 /lb.	99	15
51	MT	Sausage	q.89 /lb.	99	15
52	MT	Liver	1.29 /lb.	99	15
53	MT	Bacon	1.39 /lb.	99	15
54	MT	Rump Roast	1.19 /lb.	99	15
55	MT	Pearch	1.10 /lb.	99	15
56	MT	Lamb Chop	2.19 /lb.	99	15
57	MT	Spare Rib	1.49 /lb.	99	15
58	MT	Veal Cutlet	2.25 /lb.	99	15
59	MT	Kidneys	1.19 /lb.	99	15
60	MT	Hot Dogs	.98 /lb.	99	15

Store

Card # 5

PRODUCE

THE SALES TAX IS 3%

61	PR	Potatoes	.17 /lb.	90	15
62	PR	Lettuce	.39 /lb.	90	15
63	PR	Apples	.25 /lb.	90	15
64	PR	Apples	.23 /lb.	20	50
65	PR	Oranges	.29 /lb.	91	15
66	PR	Grapes	.49 /lb.	90	15
67	PR	Watermelon	.49 /lb.	25	20
68	PR	Canteloupe	.25 /lb.	90	15
69	PR	Lettuce	.33 /lb.	90	15
70	PR	Cabbage	.18 /lb.	25	15
71	PR	Corn	.10 /lb.	25	25
72	PR	Radish	.14 /lb.	25	5
73	PR	Green Bean	.69 /lb.	90	15
74	PR	Mushrooms	.99 /lb.	90	15
75	PR	Peaches	.43 /lb.	90	15
76	PR	Carrots	.21 /lb.	90	15
77	PR	Artichokes	.30 /lb.	90	15
78	PR	Avocodoes	.26 /lb.	90	15
79	PR	Bannanas	.27 /lb.	90	15
80	PR	Cucumber	.33 /lb.	25	5
81	PR	Tomato	.29 /lb.	25	25
82	PR	Potato	.31 /lb.	25	5
83	PR	Onions	.26 /lb.	90	15
84	PR	Celery	.34 /lb.	90	15
85	PR	Pears	.33 /lb.	90	15
86	PR	Plums	.29 /lb.	90	20
87	PR	Grapefruit	.31 /lb.	25	25
88	PR	Squash	.24 /lb.	90	15
89	PR	Pumpkin	.04 /lb.	90	15
90	PR	Okra	.59 /lb.	90	15

NON-FOODS

THE SALES TAX IS 6%

91	NF	Tide Detergent	1.23 each	89	15
92	NF	Cascade	.49 each	99	15
93	NF	Joy Dish Whg. Dtg.	.83 each	99	14
94	NF	Ajax Detergent	.89 each	99	15
95	NF	Downy Softener	1.57 each	99	15
96	NF	Clorox Bleach	.35 each	99	15
97	NF	Tide Detergnt	.49 each	89	15
98	NG	Paper Towels	.39 each	89	15
99	NF	Kleenex	.33 each	88	15
100	NF	Playboy Mag	1.00 each	86	15

To buy from COMPUTER DISCOUNT FOODS, you must input the item number of each purchase. As the store might stock up to 9,999 items, four digits are allowed for item numbers; this must be allowed for when you record a purchase. Thus, item No. 4, Campbell's Soup, must be inputted as 0004; No. 25, sugar, must be inputted as 0025 (blanks may be substituted for leading zeroes).

If an item is priced by the pound, you must also input the number of pounds you buy. This number must be a decimal number, and it must include the decimal point. Space two after the item number, and then put in the number of pounds. Thus, if you bought 1 1/2 pounds of hamburger, you would input 0041, two spaces, 1.5. If you bought one pound of cabbage, item No. 76, you would input 0076, space two, 1.0.

If you do all this properly, COMPUTER will record each item and its price, and total your shopping list.

There are three special commands to input instead of grocery item numbers:

0003 will total any particular purchase.
0002 indicates a refund (bottle returns, coupons, etc.)
0001 closes the cash register for the day.

When your shopping list is through, always input 0003 before 0001.

The cash register in the STORE program starts with a thousand dollars in it. It makes change automatically. If you are a clerk, you need to know how much money is left in the register at the end of the day. (No provision is made in the program for armed robbery.)

Store

Student Worksheet # 6a

You shop at COMPUTER and buy the following:

2 cans Campbell's soup
1 package Hostess Twinkies
1 - 1/4 pounds hamburger
1 pounds oranges
1 package Tide detergent
1 - 1/2 pounds onions
1 box Kleenex

Separate this list into food and non-ffod items and fill out the tables below:

FOOD ITEMS

ITEM NO.	ITEM NAME	UNIT PRICE	AMOUNT	TOTAL PRICE

NON-FOOD ITEMS

ITEM NO.	ITEM NAME	UNIT PRICE	AMOUNT	TOTAL PRICE

Total Price of all Food Items: _____

Sales Tax on Food Items (at 3%): _____

Total for all Non-Food Items : _____

Sales Tax for Non-Food (at (6%) _____

Total Amount Paid: _____

You give the clerk a five-dollar bill. How much change do you get back? _____

Check your answers on the STORE Program.

Store

Student Worksheet # 6b

Make up a shopping list of your own of from five to ten items.

Use the space below, and separate foods from non-foods.

FOODS

No.	Name of Item	Unit Price	Amount	Total Price
		¢		

NON-FOODS

What is the total cost of your food items? _____

What is the total cost of non-food items? _____

What is the total amount of sales tax (for food and non-food)? _____

What is the total amount you pay? _____

Determine what size bill you give the clerk: _____

What is your change? _____

Check your answers on the STORE program.

Store

Student Worksheet # 6c

You are a sales clerk at COMPUTER DISCOUNT FOODS. You start with $1000.00 in your cash register. After ringing up the shopping lists on Student Worksheets # 1 and 2, you close the register for the day. How much money is there now in the register?

In addition to the shopping lists on Student Worksheets # 1 and 2, you have one more customer before you close your cash register for the day. This customer returns two six-pack cartons of bottles, and his bottle deposit is regunded (the deposit is $.05 per bottle). How much money is there in the register?

Use the next page to make up three short shopping lists. In the second column, indicate whether each item is Grocery, Meat, Produce or Non-Food. If you ring up all three of these sales, how much money will you have in your cash register? (Remember that the sales tax on Non-Foods is 6%, while on everything else it is 3%.)

Use the STORE Program to check your answers. At the end of the program, the computer will indicate what items the store needs to reorder, and how many of each of these items are left. Using the last two columns of the original stock lists, indicate how many of each of these items need to be ordered.

Number	Item	Amount Needed

Store

Student Worksheet # 6c

You are a sales clerk at COMPUTER DISCOUNT FOODS. You start with $1000.00 in your cash register. After ringing up the shopping lists on Student Worksheets # 1 and 2, you close the register for the day. How much money is there now in the register?

In addition to the shopping lists on Student Worksheets # 1 and 2, you have one more customer before you close your cash register for the day. This customer returns two six-pack cartons of bottles, and his bottle deposit is regunded (the deposit is $.05 per bottle). How much money is there in the register?

Use the next page to make up three short shopping lists. In the second column, indicate whether each item is Grocery, Meat, Produce or Non-Food. If you ring up all three of these sales, how much money will you have in your cash register? (Remember that the sales tax on Non-Foods is .6%, while on everything else it is 3%.)

Use the STORE Program to check your answers. At the end of the program, the computer will indicate what items the store needs to reorder, and how many of each of these items are left. Using the last two columns of the original stock lists, indicate how many of each of these items need to be ordered.

Number	Item	Amount Needed

Store

Student Worksheet # 6d

List 1

No.	Department	Name	Unit Price	Amt.	Price

Total sales tax _____

Total amount spent _____

List 2

Total sales tax _____

Total amount spent _____

List 3

Total sales tax _____

Total amount spent _____

Store

Student Worksheet # 6e

You have $20.00 to spend at COMPUTER DISCOUNT FOODS, to take care of a family of three. Make out a shopping list, trying to spend wisely, and stretching the twenty dollars as far as possible. (Don't forget the sales tax!)

FOODS

ITEM NO.	NAME	UNIT PRICE	AMOUNT	TOTAL PRICE

Total cost of foods _____

Sales tax on foods _____

NON-FOODS

Total cost of non foods _____

Sales tax on non-foods _____

Total amount spent _____

Change from $20.00 _____

Use the STORE program to check your answers.

The following 4 programs were written by Terry Garyet of George Washington High School, Denver, Colorado. These programs are suitable to be run on the Univac Fortran system and will probably need modification for other systems.

BASIC*DPS003A.$STOREDATA

1	1	.000	0	0
2	2	.000	0	0
3	3	.000	0	0
4	4CAMPBELL'S SOUP	.231	6	5
5	5WONDER BREAD	.601	13	5
6	6SINTONS 2% QT.	.731	48	9
7	7CARAVELLE	.091	94	20
8	8SNAILS ESCARGOT-121	.831	47	20
9	9CANADA DRY GIN-ALE	.651	797	200
10	10MILK	.691	83	15
11	11POTATO CHIPS	.491	88	15
12	12COOKIES	.771	88	15
13	13CHEDDAR CHEESE	.651	89	15
14	14CRACKERS	.771	90	15
15	15WELCH'S JAM	.691	89	15
16	16DEL MONTE CORN	.291	90	15
17	17SIGMAN'S BOLOGNA	.291	89	15
18	18HOSTESS TWINKIES	.161	88	15
19	196-BOTTLE DEPOSIT	.301	89	15
20	20BOUNTY	.431	98	15
21	21SUGAR	.591	99	15
22	22FLOUR	.431	99	15
23	23GRAHAM CRACKERS	.651	99	15
24	24COOKIES	.421	99	15
25	25FIG BARS	.371	98	15
26	26CHARMIN	.431	98	15
27	27CAKE MIX	.301	96	15
28	28FROSTING	.411	98	15
29	29CORN OIL	.961	99	15
30	30PEARS	.221	97	15
31	31MR. CLEAN	.961	99	15
32	32BLU-BOY	.791	99	15
33	33KUNNERS KETCHUP	.271	98	15
34	34BETTY CRKR. FRSTNG	.411	99	15
35	35HAMBURGER	.902	82	15
36	36SIRLOIN STEAKS	1.892	90	15
37	37N.Y. STEAK	2.392	99	15
38	38TOP SIRLOIN	2.592	99	15
39	39SIRLOIN	1.692	99	15
40	40FILET	2.982	98	15
41	41T-BONE	1.892	98	15
42	42RD. STEAK	1.492	99	15
43	43RIB EYE	2.352	99	15
44	44CUBE STEAK	1.492	99	15
45	45CHICKEN	.592	87	15
46	46TURKEY	.952	98	15
47	47HAM HOCKS	.892	99	15
48	48SHANK HAM	.892	97	15

49	49HAM	.988	96	15
50	50RIB ROAST	1.498	93	15
51	51SAUSAGE	1.898	99	15
52	52LIVER	1.298	99	15
53	53BACON	1.398	98	15
54	54RUMP ROAST	1.198	97	15
55	55PEARCH	1.108	97	15
56	56LAMB CHOP	8.198	95	15
57	57SPARE RIB	1.498	97	15
58	58VEAL CUTLET	8.858	99	15
59	59KIDNEYS	1.198	99	15
60	60HOT DOGS	.988	95	15
61	61POTATOES	.173	90	15
62	62LETTUCE	.393	90	15
63	63APPLES	.853	88	15
64	64APPLES	.233	0	50
65	65ORANGES	.893	89	15
66	66GRAPES	.493	88	15
67	67WATERMELON	.493	84	80
68	68CANTELOUPE	.253	90	15
69	69LETTUCE	.333	90	15
70	70CABBAGE	.183	85	15
71	71CORN	.103	88	85
72	72RADISH	.143	85	5
73	73GREEN BEAN	.693	90	15
74	74MUSHROOMS	.993	90	15
75	75PEACHES	.433	90	15
76	76CARROTS	.213	90	15
77	77ARTICHOKES	.303	90	15
78	78AVOCODOES	.863	90	15
79	79BANNANAS	.273	90	15
80	80CUCUMBER	.333	85	5
81	81TOMATO	.893	85	85
82	82POTATO	.313	84	5
83	83ONIONS	.863	86	15
84	84CELERY	.343	90	15
85	85PEARS	.333	90	15
86	86PLUMS	.893	90	90
87	87GRAPEFRUIT	.313	85	85
88	88SQUASH	.843	90	15
89	89PUMPKIN	.043	90	15
90	90OKRA	.593	90	15
91	91TIDE DETERGENT	1.234	86	15
92	92CASCADE	.494	99	15
93	93JOY DISH WHG. DTG.	.834	98	14
94	94AJAX DETERGENT	.894	99	15
95	95DOWNY SOFTENER	1.574	99	15
96	96CLOROX BLEACH	.354	98	15
97	97TIDE DETERGNT	.494	89	15
98	98PAPER TOWELS	.394	88	15
99	99KLEENEX	.334	81	15
100	100PLAYBOY MAG	1.004	82	15

```
BASIC*DPS003A.STORE
      1       *XQT DPS003A.STORE
      2       *ADD DPS003A.STOREDATA
```

```
BASIC*SNM.STORE/SOURCE
    1       @ASG,T TEMP,F14///128
    2       @BRKPT PRINTS/TEMP
    3       @ASG,T 9,F14///128
    4       @ASG,T 10,F14///128
    5       @ASM,I ,ADD
    6        AXRS
    7       $(0)
    8       PF FORM 18,6,18
    9       CSF1    '@COPY,I 9.,DPS003A.STOREDATA'
   10       CSF2 '@BRKPT PRINTS/TEMP'
   11       CSF3 '@BRKPT PRINTS     '
   12       CSF4    '@ADD TEMP.'
   13       $(1)
   14       ADD* LA A0,(3,CSF2)
   15        ER CSFS
   16        PSRINT    (PF 1,5,CSF1)
   17        LA A0,(3,CSF3)
   18        ER CSFS
   19         LA  A0,(2,CSF4)
   20         ER   CSFS
   21        J 1,X11
   22          END
   23       @ASM,E BASIC*DPS003A.DATE/GORALNIK,DATE
   24       @ASM,E BASIC*DPS003A.DECOCT/GORALNIK,DECOCT
   25       @RFOR,IS STORE,STORE
   26             INTEGER DEPT(1000),ID(1000,3),INV(1000),CUST,REORD(100
     0), REFNO,TA
   27            CG(4),ACCNT
   28             REAL PRICE(1000),NET,TOTLK(150),CHRG(10)
   29             CALL DATE(IMO,IDY,IYR)
   30             IR=0
   31             TAG(1)='GR'
   32             TAG(2)='MT'
   33             TAG(3)='PR'
   34             TAG(4)='NF'
   35             TOTLC=0
   36             CUST=0
   37             SALE=0
   38             TTAX=0
   39             TCHG=0
   40             CPNTTL=0
   41             REFUND=0
   42             REFNO=0
   43             REC=1000.
   44             DO 10 I=1,100
   45       10    READ(5,15)(ID(I,J),J=1,3),PRICE(I),DEPT(I),INV(I),REOR
     D(I)
   46       15    FORMAT(3X,3A6,F4.2,I1,2I4)
   47       5     WRITE(6,22)
   48       22    FORMAT(1HO,'UNIVAC DISCOUNT FOODS'/1H ,'DEPT ITEM',6X,
     'ITEM',6X,'P
```

```
49          CRICE')
50       20  READ(5,25)ITEM,WT
51       85  FORMAT(I4,4X,F5.2)
58          I2=DEPT(ITEM)
53          IF(ITEM.EQ.1)GO TO 100
54          PRC=PRICE(ITEM)
55          IF(ITEM.EQ.3)GO TO 80
56          IF(IR)35,35,50
57       30 TOTLC=0
58          TTLNF=0
59          GO TO 5
60       35 IF(ITEM-2)37,36,37
61       36 IR=1
62          GO TO 56
63       37 IF(INV(ITEM))1000,1000,41
64       1000 WRITE(6,1001)
65       1001 FORMAT(1H ,'SORRY, WE ARE OUT OF')
66          GO TO 39
67       41 IF(DEPT(ITEM).NE.4)GO TO 38
68          TTLNF=TTLNF+PRC
69          GO TO 42
70       38 IF(DEPT(ITEM)-1)45,45,46
71       46 PRC=PRC*WT
72          IF(DEPT(ITEM)-3)45,44,45
73       44 INV(ITEM)=INV(ITEM)-WT
74          TOTLC=TOTLC+PRC
75          GO TO 39
76       45 TOTLC=TOTLC+PRC
77       42 INV(ITEM)=INV(ITEM)-1
78       39 WRITE(6,40)TAB(I2),ITEM,(ID(ITEM,J),J=1,3),PRC
79       40 FORMAT(1H ,A3,8X,I3,2X,3A6,5X,'$',F7.2)
80          GO TO 20
81       50 IF(DEPT(ITEM).NE.4)GO TO 51
82          TTLNF=TTLNF-PRC
83          GO TO 54
84       51 IF(DEPT(ITEM)-1)54,54,53
85       53 PRC=PRICE(ITEM)*WT
86       54 TOTLC=TOTLC-PRC
87          REFUND=REFUND+PRC
88          REFNO=REFNO+1
89          IR=0
90          GO TO 39
91       56 WRITE(6,55)
92       55 FORMAT(1H ,'THE FOLLOWING ITEM IS REFUNDED.')
93          GO TO 20
94       80 TAX=(TTLNF*.06)+(TOTLC*.03)
95          TTAX=TTAX+TAX
96          WRITE(6,85)TAX
97       85 FORMAT(1H ,8X,'TAX',10X,'$',3X,F7.2)
98          TOTLC=TOTLC+TAX+TTLNF
99          SALE=SALE+TOTLC
100         WRITE(6,90)TOTLC
101      90 FORMAT(1H ,8X,'TOTAL',8X,'$',F8.2)
102      551 WRITE(6,521)
103      521 FORMAT(' AMT TENDERED?')
104         READ(5,91)AMTND,COUPON,ACCNT
```

```
105                IF(AMTND.LT.TOTALC)GO TO 551
106          91    FORMAT(F7.2,1X,F3.2,1X,I2)
107                CPNTTL=CPNTTL+COUPON
108                IF(ACCNT)93,93,92
109          92    AMTND=TOTLC
110                CHRG(ACCNT)=CHRG(ACCNT)+TOTLC
111          93    CHNG=AMTND-(TOTLC-COUPON)
112                TCNG=TCNG+CHNG
113                WRITE(6,95)AMTND,COUPON,CHNG,IMO,IDY,IYR
114          95    FORMAT(1H ,8X,'AMT TENDERED $',3X,F7.2,/1H ,8X,'COUPON
     ',7X,'$',3X,
115               CF5.2,/1H ,8X,'CHANGE ',6X,'$',3X,F7.2/1H ,7X,I2,2('/',
     I2),/1H ,8X,
116               C'THANK YOU'///)
117                CUST=CUST+1
118                TOTLK(CUST)=TOTLC
119                GO TO 30
120          100   WRITE(6,101)
121          101   FORMAT(1H1,T10,'CLOSING TOTALS'//1H ,'THE FOLLOWING IT
     EMS SHOULD B
122               CE REORDERED'/1H ,'ITEM',8X,'PRODUCT',5X,'NO IN STOCK')
123                DO 105 I=4,100
124                IF(INV(I)-REORD(I))102,102,105
125          102   WRITE(6,103)I,(ID(I,J),J=1,3),INV(I)
126          105   CONTINUE
127          103   FORMAT(1H ,I4,2X,3A6,4X,I4)
128                NET=SALE-TTAX
129                REG=REG+(SALE-CPNTTL-TCNG)
130                WRITE(6,110)CUST,SALE,TTAX,NET,REFNO,REFUND,CPNTTL,REG
     ,(I,TOTLK(I)
131               C,I=1,CUST)
132          110   FORMAT(1H1,'TOTALS FOR TODAY'/1H ,'CUSTOMERS ',I4/1H ,
     'GROSS $',F7
133               C.2/1H ,'TAXES $',F7.2/1H ,'NET',3X,'$',F7.2,/1H ,I3,1X
```

```
   ,'REFUNDS TO
134             CTALLING $',F6.2/1H ,'COUPONS $',F5.2/1H ,'CASH IN REGI
   STER $'
135             C,F8.2//1H ,'CUST TOTAL',150(/1H ,I3,1X,F5.2))
136              DO 120 I=1,100
137         120  WRITE(9,125)I,(ID(I,J),J=1,3),PRICE(I),DEPT(I),INV(I),
   RECORD(I)
138         125  FORMAT(I3,3A6,F4.2,I1,2I4)
139              DO 130 I=1,10
140         130  WRITE(10,132)I,CHRG(I)
141         132  FORMAT(I2,F6.2)
142              END FILE 9
143              END FILE 10
144              CALL ADD
145              END
146        @MAP,INO ,STORE
147         IN ADD
148         IN STORE
149         IN DATE
150         IN DECOCT
151        @BRKPT PRINTS
152        @XQT STORE
153        @ADD BASIC*DPS003A.STOREDATA
```