# DECUS
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| DECUS NO. | FOCAL8-122 |
| TITLE | CHARGE ACCOUNT |
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| COMPANY | George Washington High School<br>Philadelphia, Pennsylvania |
| DATE | January 8, 1970 |
| SOURCE LANGUAGE | FOCAL |

# CHARGE ACCOUNT

DECUS Program Library Write-up DECUS NO. FOCAL8-122

## ABSTRACT

This program is useful in teaching high school students manipulation of subscripted arrays. It also gives academic students an introduction to business applications. The data included was taken from one of the types of charge accounts offered by a local department store.

The program is written in terms of a matrix of files, records, and fields, causing characters and instructions that might have been eliminated. This would have eliminated some of the teaching objectives. Explanatory comments were omitted from the program due to lack of storage. Following is a general description that must be read before executing the program:

1. First, Customer File is input from the high speed reader. The file consists of 5 records and 2 fields (customer no. and previous balance).

2. Secondly, Transaction File is input from the ASR 33. This file consists of a variable no. of records and fields, Customer no., followed by one or more transactions (+ for payments, - for purchases). End of record signal is Ø; end of file signal is 6.

3. Output assumes pre-printed customer statements. Customer no., previous balance, purchases, payments, service charge (where applicable), new balance, and a threat (where applicable) are output on the ASR 33.

4. On signal from the ASR 33, output is changed to high speed and the updated customer file is outputted. This is then usable as input for the next update.

5. The service charge and threat ( a weak attempt at humor) are based on the minimum payments table used by a local department store.

6. Be careful to enter ERASE before running the program.

7. The following patch is needed to enable the high speed input-output. Location 6322 is for the PDP-8/S only.

| LOCATION | CONTENT |
|---|---|
| 0063 | 1354 |
| 0064 | 2414 |
| 2732 | 5336 |
| 2762 | 7000 |
| 6322 | 1120 |
| 6324 | 6011 |
| 6325 | 7410 |

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C-FOCAL,1969

Ø1.Ø1   S   M(Ø)=6Ø;S M(7)=1Ø-
Ø1.Ø2   S   XF=Ø;F R=1,6;S M(R+7*XF)=M(R-1+7*XF)+3Ø
Ø1.Ø3   S   XF=1;F R=1,6;S M(R+7*XF)=M(R-1+7*XF)+5
Ø1.1Ø   *;A R,XF;F R=Ø,4;F XF =Ø,1;A A(R+5*XF)-
Ø1.11   *;T !
Ø1.2Ø   A CN;I (CN-6)1.3,1.4,1.4-
Ø1.3Ø   F   R=Ø,4;D 2.Ø
Ø1.31   GOTO 1.2
Ø1.4Ø   F   R=Ø,4;D 3.Ø
Ø1.5Ø   F   R=Ø,4;T !;D 4.Ø
Ø1.6Ø   S   S=Ø;S XF=2;F R=Ø,4;S S=A(R+5*XF)+S
Ø1.7Ø   S   C=Ø;S XF=3;F R=Ø,4;S C=A(R+5*XF)+C-
Ø1.8Ø   S   B=Ø;S XF=4;F R=Ø,4;S B=A(R+5*XF)+B-
Ø1.9Ø   T   !,!,"SALES",S,"   COLLECTIONS",C,"    BALANCE",B-
Ø1.91   T   !,"G 1.92,ON,R";Q
Ø1.92   F   R=Ø,4;F XF=Ø,4,4;T A(R+5*XF)
Ø1.93   Q

Ø2.1Ø   S   XF=Ø;I (A(R+5*XF)-CN)2.7,2.2,2.7
Ø2.2Ø   A   TR;I (TR)2.3,2.8,2.5
Ø2.3Ø   S   XF=2;S A(R+5*XF)=A(R+5*XF)+TR-
Ø2.4Ø   GOTO 2.2
Ø2.5Ø   S XF=3;S A(R+5*XF)=A(R+5*XF)+TR-
Ø2.6Ø   GOTO 2.2
Ø2.7Ø   R
Ø2.8Ø   S R=5

Ø3.1Ø   S   XF=1;S A(R+5*(XF+3))=A(R+5*XF)+A(R+5*(XF+1))+A(R+5*(XF+2))-

Ø4.1Ø   F   XF=Ø,3;T %6.Ø2,A(R+5*XF),"   "
Ø4.2Ø   F   I=Ø,6;D 5.Ø
Ø4.3Ø   S   XF=4;T %6.Ø2,A(R+5*XF)
Ø4.4Ø   I   (TH)4.6,4.6,4.5-
Ø4.5Ø   T   !,"PAY OR DIE"
Ø4.6Ø   T   !;R
Ø4.7Ø   S   XF=4;S SC=.Ø125*A(R+5*XF)
Ø4.8Ø   T   !,"PAY OR DIE";T !,"SVC CHG",SC
Ø4.9Ø   S   A(R+5*XF)=A(R+5*XF)+SC;S I=7

Ø5.1Ø   S   J=Ø;S XF=1;I (A(R+5*XF))5.2,5.4,5.4
Ø5.2Ø   I   (A(R+5*XF)+M(I+7*J))5.3,5.5,5.5
Ø5.3Ø   I   (I-6)5.31;S MP=A(R+5*XF)/6;GOTO 5.6-
Ø5.31   R
Ø5.4Ø   S   TH=Ø;S I=7;T "        ";R-
Ø5.5Ø   S   J=1;S XF=3;S MP=M(I+7*J)
Ø5.6Ø   I   (A(R+5*XF)-MP)5.7,5.4,5.4-
Ø5.7Ø   S   XF=4;S SC=.Ø125*A(R+5*XF)-
Ø5.8Ø   S   TH=1;T SC,"  "
Ø5.9Ø   S   A(R+5*XF)=A(R+5*XF)+SC;S I=7-
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