DEBUG05

**DEBUG05-01**

// This program is supposed to display every fifth year

// starting with 2017; that is, 2017, 2022, 2027, 2032,

// and so on, for 30 years.

start

Declarations

num year

num START\_YEAR = 2017

num FACTOR = 5

num END\_YEAR = 30

// replaced with for loop

for year = START\_YEAR to START\_YEAR + END\_YEAR step FACTOR

output year

endfor

stop

**DEBUG05-02**

// A standard mortgage is paid monthly over 30 years.

// This program is intended to output 360 payment coupons

// for each new borrower at a mortgage company.

// Each coupon lists the month number, year number,

// and a friendly mailing reminder.

start

Declarations

num MONTHS = 12

num YEARS = 30

string MSG = "Remember to allow 5 days for mailing"

num acctNum

num yearCounter

num monthCounter // undeclared variable

string QUIT = "ZZZ" // undeclared variable

housekeeping()

while acctNum <> QUIT // misspelled variable

printCoupons()

endwhile

finish()

stop

housekeeping()

output "Enter account number or ", QUIT, " to quit " // not print

input acctNum

return

printCoupons() // replaced with for loops

for yearCounter = 1 to YEARS step 1

for monthCounter = 1 to MONTHS step 1

print acctNum, monthCounter, yearCounter, MSG

endfor

endfor

output "Enter account number or ", QUIT, " to quit "

input acctNum

return

finish()

output "End of job"

return

**DEBUG05-03**

// This program displays every combination of three-digits

start

Declarations

num digit1 // I don’t think it’s wrong to initialize here, just redundant so I removed it

num digit2

num digit3

// replaced with for loops

for digit1 = 0 to 9 step 1

for digit2 = 0 to 9 step 1

for digit3 = 0 to 9 step 1

output digit1 digit2 digit3

endfor

endfor

endfor

stop