// Marian Basting takes in small sewing jobs.

// She has two files sorted by date.

// (The date is composed of two numbers -- month and year.)

// One file holds new sewing projects

// (such as "wedding dress")

// and the other contains repair jobs

// (such as "replace jacket zipper").

// Each file contains the month, day, client name, phone number,

// job description, and price.

// Currently, this program merges the files to produce

// a report that lists all of Marian's jobs for the year

// in date order.

// Modify the program to also display her total earnings

// at the end of each month as well as at the end of the year.

start

Declarations

num newMonth

num newDay

string newName

string newPhone

string newDescription

num newPrice

num repairMonth

num repairDay

string repairName

string repairPhone

string repairDescription

num repairPrice

num newDate

num repairDate

string bothAtEof = "N"

num HIGH\_MONTH = 99

InputFile newJobs

InputFile repairJobs

string oldDate

num monthEarnings = 0

num yearEarnings = 0

getReady()

while bothAtEof = "N"

detailLoop()

endwhile

finish()

stop

getReady()

open newJobs "NewJobs.dat"

open repairJobs "RepairJobs.dat"

input newMonth, newDay, newName, newPhone,

newDescription, newPrice from newJobs

if eof then

newMonth = HIGH\_MONTH

endif

input repairMonth, repairDay, repairName, repairPhone,

repairDescription, repairPrice from repairJobs

if eof then

repairMonth = HIGH\_MONTH

endif

if newMonth > repairMonth then

oldMonth = repairMonth

else oldMonth = newMonth

endif

if newMonth = HIGH\_MONTH AND repairMonth = HIGH\_MONTH then

bothAtEof = "Y"

endif

return

detailLoop()

if oldMonth <> newMonth and oldMonth <> repairMonth then

controlBreak()

endif

newDate = newMonth \* 100 + newDay

repairDate = repairMonth \* 100 + repairMonth

// This arithmetic turns each date into a 3- or 4-digit number

if newDate > repairDate then

output repairMonth, repairDay, repairName, repairPhone, repairDescription, repairPrice

input repairMonth, repairDay, repairName, repairPhone,

repairDescription, repairPrice from repairJobs

if eof then

repairMonth = HIGH\_MONTH

endif

else

output newMonth, newDay, newName, newPhone,

newDescription, newPrice

input newMonth, newDay, newName, newPhone,

newDescription, newPrice from newJobs

if eof then

newMonth = HIGH\_MONTH

endif

endif

monthEarnings = monthEarnings + repairPrice + newPrice

yearEarnings = repairPrice + newPrice

if newMonth = HIGH\_MONTH AND repairMonth = HIGH\_MONTH then

bothAtEof = "Y"

endif

return

controlBreak()

output "Monthly total: ", monthEarnings

monthEarnings = 0

oldMonth = newMonth

return

finish()

output "End of year earnings: ", yearEarnings

close newJobs

close repairJobs

return