'sort all elements in list of results according to time shift started

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'Modifications: Sorts record structures, not plain arrays. Allows sorting entire structure by one specific field.

Private Sub quickSort

'sort by one specific field

If length of List > 1 then

pivot = first element of the array

start = first index of array

end = last index of array

while start <= end

while array(start) < pivot

increment start by 1

end while

while array(end) > pivot

decrement end by 1

end while

if start <= end then

swap array(start) with array(end)

increment start by 1

decrement end by 1

end if

end while

quickSort(array from first index to End)

quickSort(array from Start to last index)

End Sub

'Save results of search (shifts and statistics) to a text file at path specified by user

Private Sub save search results button is clicked

show save file dialogue (dlgSaveResuts) and get file path

create/overwrite text file

write header to file

write employees name to file

for each results

write result to file

end for

write "Employee statistics:" header to file

write employee statistics to file

close text file

End Sub

'Search archived rosters for all shifts worked by specified employee. Also calculate basic statistics from these results

Private Sub when Search button clicked

'search archive from this year back to MAXYEAR years in the past

For each year to search

reset local variables

if MAXYEARs have not elapsed since 2019

search from oldest existing archive

end if

if roster from year exists then

for each week of year

if roster from week exists then

Open Excel Application

Open roster Workbook

Open primary Worksheet

for each day of the week

for each record in sheet

if found name of employee

copy information from spreadsheet archive to results array

add resultant shift to listbox

increment totalShifts by 1

increment totalHours by length of shift

if timeStart is earlier than earliestStart then

earliestStart = timeStart

end If

if timeEnd is later than latestEnd then

latestEnd = timeEnd

end if

end if

end for

end for

close files

end if

end for

end if

end for

populate every text-box with corresponding data

enable sort and save results buttons

End Sub

'Sort results of search by time shift was started

Private Sub when sort results button is clicked

quickSort results by shift start time

Clear shifts worked listbox

'repopulate listbox

for each item in sorted list

add item to listbox

end for

End Sub