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Rem =====
Rem   A_Sorting_OoBasic Program (Copyright:Shuichi Sunaga)
Rem (2005/10/31:262)(2009/09/22:375)(2012/05/09:346)
Rem Translation into English (2012/08/14:331)
Rem =====
Rem Sub Sort4Rep()   Sorting of BK,AP,AR,JV to arrange in report format
Rem Sub SortBK(ByVal key0%, ByVal key1%, ByVal key2%)
Rem Sub SortJV(ByVal key0%, ByVal key1%, ByVal key2%)
Rem Sub SortMW(ByVal iColPlus, iColAdd, iColDed, iColPost%) 'Ver2005/03/21
Rem Sub SortLN(ByVal strtRow%)
Rem Sub SortPara(ByVal oSortRange as object, ByVal key0, key1, key2%)
Rem Sub PostRAct(ByVal fRow&, ByVal fvEnd&, ByVal fCol_BalEnd%)
Rem Function LNEndLN%(ByVal StartLN%)
Rem =====
Option Explicit
Sub Sort4Rep()
    dim args(0) as new com.sun.star.beans.PropertyValue
    dim oCell as Object
    dim orgCol%, orgRow&, hiddenCol%
    hiddenCol% = 0
    IntroTo3D()
    args(0).Name = "AutomaticCalculation"
    If Not StopOrGo("Sort4Rep") then
        MsgTxt$ = "Sorting command is unusable on this " & aSName$ & "sheet."
        MsgTtl$ = "Test of Command of Applicability to the sheet"
        resp% = MsgBox(MsgTxt$, 16, MsgTtl$)
        End
    End If
    targetRow& = SeekTbRow&(aSheet, "ValMo", cMonth%, cMonth%, "Top")
    If IsCMDTNull then
        MsgTxt$ = "Will abort sorting due to lack of transaction data for the "&chr(13)
        MsgTxt$ = MsgTxt$ & "current month (" & CStr(cMonth%) & ")."
        MsgTtl$ = "Test of existence of current month transaction data"
        resp% = MsgBox(MsgTxt$, 0, MsgTtl$)
        End
    End If
    setOptState(aSName$) '--- include getPagePlan
    aSheet.UnProtect("pwd")
    args(0).Value = false
    dispatcher.executeDispatch(aController, ".uno:AutomaticCalculation", "", 0, args())
    If SelectionRow() < 3 Then
        SelectCell 3, SelectionColumn()
    End If
    orgRow& = SelectionRow()
    orgCol% = SelectionColumn()
    oCell=aSheet.getCellRangeByName(GetCellName$(orgRow&, orgCol%))
    aSheet.getCellRangeByPosition(0, CNRow%-1, 0, CNRow%-1).Rows.IsVisible = False
    aSheet.getCellRangeByPosition(0, CNRow%, 0, CNRow%).Rows.IsVisible = True
    Rem If aController.hasFrozenPanes () then
        Rem dispatcher.executeDispatch(aController.Frame, ".uno:FreezePanes", "", 0, Array())
    Rem End If
    Rem =====
    Select Case aSName$
        Case "BK"
            SortBK Col_ValMo%, Col_BKCD%, Col_LineNo%
            SetCellValue WkCL, 2, BKCol, cMonth%
        Case "JV"
            SortJV Col_ValMo%, Col_LineNo%, Col_InvDate%
            SetCellValue WkCL, 2, JVCol, cMonth%
            aController.Select(oCell)
        Case "AP"
            If bAllocDpt then
                SortMW NumDpt, Col_ValMo%, Col_PaidMo%, Col_Gross%
            Else
                SortMW 0, Col_ValMo%, Col_PaidMo%, Col_Gross%
            End If
            SetCellValue WkCL, 2, APCol, cMonth%
        Case "AR"
            If bAllocDpt then
                SortMW(NumDpt, Col_ValMo%, Col_PaidMo%, Col_Gross%)

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1 Rem =====
2 Rem   A_Sorting Excel VBA Program (Copyright:Shuichi Sunaga)
3 Rem   (2012/04/24:281)
4 Rem   Translation into English (2012/08/14:284)
5 Rem =====
6 Rem Sub Sort4Rep()   Sorting of BK,AP,AR,JV to arrange in report format
7 Rem Sub SortBK(ByVal key0%, ByVal key1%, ByVal key2%)
8 Rem Sub SortJV(ByVal key0%, ByVal key1%, ByVal key2%)
9 Rem Sub SortMW(ByVal iColPlus, iColAdd, iColDed, iColPost%) 'Ver2005/03/21
10 Rem Sub SortLN(ByVal strtRow%)
11 Rem Sub SortPara(ByVal oSortRange as object, ByVal key0, key1, key2%)
12 Rem Sub PostRAct(ByVal fRow&, ByVal fvEnd&, ByVal fCol_BalEnd%)
13 Rem Function LNEndLN%(ByVal StartLN%)
14 Rem =====
15 Option Explicit
16 Sub Sort4Rep()
17
18     Dim oCell As Range
19     Dim orgCol%, orgRow&, hiddenCol%
20     hiddenCol% = 0
21     IntroTo3D
22
23     If Not StopOrGo("Sort4Rep") Then
24         MsgTxt$ = "Sorting command is unusable on this " & aSName$ & "sheet."
25         MsgTtl$ = "Test of Command of Applicability to the sheet"
26         resp% = MsgBox(MsgTxt$, 16, MsgTtl$)
27         End
28     End If
29     targetRow& = SeekTbRow&(aSheet, "ValMo", cMonth%, cMonth%, "Top")
30     If IsCMDTNull Then
31         MsgTxt$ = "Will abort sorting due to lack of transaction data for the " & Chr(13)
32         MsgTxt$ = MsgTxt$ & "current month (" & CStr(cMonth%) & ")."
33         MsgTtl$ = "Test of existence of current month transaction data"
34         resp% = MsgBox(MsgTxt$, 0, MsgTtl$)
35         End
36     End If
37     setOptState (aSName$) '--- include getPagePlan
38     aSheet.Unprotect ("pwd")
39
40     Application.Calculation = xlManual
41     If SelectionRow < 3 Then
42         SelectCell 3, SelectionColumn%
43     End If
44     orgRow& = SelectionRow&
45     orgCol% = SelectionColumn%
46     Set oCell = aSheet.Cells(orgRow&, orgCol%)
47     aSheet.Rows(CNRow%).Hidden = True
48     aSheet.Rows(CNRow% + 1).Hidden = False
49
50
51
52 Rem =====
53 Select Case aSName$
54     Case "BK"
55         SortBK Col_ValMo%, Col_BKCD%, Col_LineNo%
56         SetCellValue WkCL, 2, BKCol, CLng(cMonth%)
57     Case "JV"
58         SortJV Col_ValMo%, Col_LineNo%, Col_InvDate%
59         SetCellValue WkCL, 2, JVCol, CLng(cMonth%)
60         oCell.Select
61     Case "AP"
62         If bAllocDpt Then
63             SortMW NumDpt, Col_ValMo%, Col_PaidMo%, Col_Gross%
64         Else
65             SortMW 0, Col_ValMo%, Col_PaidMo%, Col_Gross%
66         End If
67         SetCellValue WkCL, 2, APCol, CLng(cMonth%)
68     Case "AR"
69         If bAllocDpt Then
70             SortMW NumDpt, Col_ValMo%, Col_PaidMo%, Col_Gross%

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Else
    SortMW 0, Col_ValMo%, Col_PaidMo%, Col_Gross%
End If
SetCellValue WkCL, 2, ARCol, cMonth%
Case "MW"
    If bAllocDpt then
        SortMW NumDpt, Col_PaidMo%, Col_ValMo%, Col_Amount%
    Else
        SortMW 0, Col_PaidMo%, Col_ValMo%, Col_Amount%
    End If
    SetCellValue WkCL, 2, MWCol, cMonth%
End Select
Rem =====
Rem Unable to use formula in JE Amount column or With-VAT Amount column
If iWS(aSName$) <> 9 then
    aSheet.GetCellRangeByPosition(0, 0, 0, 0).Rows.IsVisible = False
    args(0).Value = True
    dispatcher.executeDispatch(aController, ".uno:AutomaticCalculation", "", 0, args())
End If
If SelectionRow() < dbMonthTop& then
    SelectCell dbMonthTop + 1, SelectionColumn()
Elseif SelectionRow() > dbMonthBtm& then
    SelectCell dbMonthBtm + 1, SelectionColumn()
End If
aSheet.Protect("pwd")
End Sub
Sub SortBK(ByVal key0%, ByVal key1%, ByVal key2%)
    Dim oCellRange As Object
    Dim cRow&, newR&, sLine$, iBKCD%
    Rem If WkBK.AutoFilterMode Then
        Rem WkBK.Columns(Col_Amount% + NumDpt + 2).AutoFilter
    Rem End If
    cRow& = SelectionRow&
    sLine$ = CellString(WkBK, cRow&, Col_LineNo%)
    iBKCD% = CellString(WkBK, cRow&, Col_BKCD%)
    RNM$ = cna$ & CStr(CNRow% + 2) & cjc$
    RNM$ = RNM$ & CAlpha(Col_Amount% + NumDpt + 2) & "$" & CStr(dbBtmBorder&)
    Set oCellRange = WkBK.GetCellRangeByName(RNM$)
    SortPara oCellRange, key0%, key1%, key2%
    targetRow& = SeekTbRow&(WkBK, "ValMo", cMonth%, cMonth%, "Btm")
    RNM$ = cna$ & CStr(CNRow% + 2) & cjc$ & cna$ & CStr(dbBtmBorder&)
    WkBK.GetCellRangeByName(RNM$).Rows.IsVisible = False
    If Not IsCMDTNull Then
        RNM$ = cna$ & CStr(dbMonthTop&) & cjc$ & cna$ & CStr(dbMonthBtm&)
        WkBK.GetCellRangeByName(RNM$).Rows.IsVisible = True
    End If

    Rem aController.FreezeAtPosition(Col_Descr%, 2)
    If CellValue(WkBK, cRow&, Col_ValMo%) = cMonth% Then
        newR& = getBKRow&(sLine$, iBKCD%)
        SelectCell myMin(cRow&, newR&), Col_Descr% + 1
        LineCalc ("N")
        SelectCell newR&, Col_Descr% + 1
    End If
End Sub
Sub SortJV(ByVal key0%, ByVal key1%, ByVal key2%)
    Dim oCellRange As Object
    RNM$ = cna$ & CStr(CNRow% + 2) & cjc$
    RNM$ = RNM$ & CAlpha(Col_Amount% + NumDpt + 2) & "$" & CStr(dbBtmBorder& - 3)
    Set oCellRange = WkJV.GetCellRangeByName(RNM$)
    Rem aController.FreezeAtPosition(Col_Descr%, 2)
    SortPara oCellRange, key0%, key1%, key2%
    targetRow& = SeekTbRow&(WkJV, "ValMo", cMonth%, cMonth%, "Btm")
    RNM$ = cna$ & CStr(CNRow% + 2) & cjc$ & cna$ & CStr(dbBtmBorder& - 3)
    WkJV.GetCellRangeByName(RNM$).Rows.IsVisible = False
    If Not IsCMDTNull Then
        RNM$ = cna$ & CStr(dbMonthTop&) & cjc$ & cna$ & CStr(dbMonthBtm&)
        WkJV.GetCellRangeByName(RNM$).Rows.IsVisible = True
    End If
    RNM$ = cna$ & CStr(dbBtmBorder& - 2) & cjc$ & cna$ & CStr(dbBtmBorder&)

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71 Else
72     SortMW 0, Col_ValMo%, Col_PaidMo%, Col_Gross%
73 End If
74 SetCellValue WkCL, 2, ARCol, CLng(cMonth%)
75 Case "MW"
76     If bAllocDpt Then
77         SortMW NumDpt, Col_PaidMo%, Col_ValMo%, Col_Amount%
78     Else
79         SortMW 0, Col_PaidMo%, Col_ValMo%, Col_Amount%
80     End If
81     SetCellValue WkCL, 2, MWCol, CLng(cMonth%)
82 End Select
83 Rem =====
84 Rem Unable to use formula in JE Amount column or With-VAT Amount column
85 If iWS(aSName$) <> 9 Then
86     aSheet.Rows(1).Hidden = True
87
88     Application.Calculation = xlAutomatic
89 End If
90 If SelectionRow < dbMonthTop& Then
91     SelectCell dbMonthTop& + 1, SelectionColumn%
92 Elseif SelectionRow() > dbMonthBtm& Then
93     SelectCell dbMonthBtm& + 1, SelectionColumn%
94 End If
95 aSheet.Protect ("pwd")
96 End Sub
97 Sub SortBK(ByVal key0%, ByVal key1%, ByVal key2%)
98     Dim oCellRange As Range
99     Dim cRow&, newR&, sLine$, iBKCD%
100     If WkBK.AutoFilterMode Then
101         WkBK.Columns(Col_Amount% + NumDpt + 2).AutoFilter
102     End If
103     cRow& = SelectionRow&
104     sLine$ = CellString(WkBK, cRow&, Col_LineNo%)
105     iBKCD% = CellString(WkBK, cRow&, Col_BKCD%)
106     RNM$ = "$A$" & CStr(CNRow% + 2) & ":"
107     RNM$ = RNM$ & CAlpha(Col_Amount% + NumDpt + 2) & "$" & CStr(dbBtmBorder&)
108     Set oCellRange = WkBK.Range(RNM$)
109     SortPara oCellRange, key0%, key1%, key2%
110     targetRow& = SeekTbRow&(WkBK, "ValMo", cMonth%, cMonth%, "Btm")
111     RNM$ = "$A$" & CStr(CNRow% + 2) & ":$A$" & CStr(dbBtmBorder&)
112     WkBK.Range(RNM$).EntireRow.Hidden = True
113     If Not IsCMDTNull Then
114         RNM$ = "$A$" & CStr(dbMonthTop&) & ":$A$" & CStr(dbMonthBtm&)
115         WkBK.Range(RNM$).EntireRow.Hidden = False
116     End If
117     SelectCell 3, Col_Descr% + 1
118     ActiveWindow.FreezePanels = True
119     If CellValue(WkBK, cRow&, Col_ValMo%) = cMonth% Then
120         newR& = getBKRow&(sLine$, iBKCD%)
121         SelectCell myMin(cRow&, newR&), Col_Descr% + 1
122         LineCalc ("N")
123         SelectCell newR&, Col_Descr% + 1
124     End If
125 End Sub
126 Sub SortJV(ByVal key0%, ByVal key1%, ByVal key2%)
127     Dim oCellRange As Range
128     RNM$ = "$A$" & CStr(CNRow% + 2) & ":"
129     RNM$ = RNM$ & CAlpha(Col_Amount% + NumDpt + 2) & "$" & CStr(dbBtmBorder& - 3)
130     Set oCellRange = WkJV.Range(RNM$)
131
132     SortPara oCellRange, key0%, key1%, key2%
133     targetRow& = SeekTbRow&(WkJV, "ValMo", cMonth%, cMonth%, "Btm")
134     RNM$ = "$A$" & CStr(CNRow% + 2) & ":" & "$A$" & CStr(dbBtmBorder& - 3)
135     WkJV.Range(RNM$).EntireRow.Hidden = True
136     If Not IsCMDTNull Then
137         RNM$ = "$A$" & CStr(dbMonthTop&) & ":" & "$A$" & CStr(dbMonthBtm&)
138         WkJV.Range(RNM$).EntireRow.Hidden = False
139     End If
140     RNM$ = "$A$" & CStr(dbBtmBorder& - 2) & ":" & "$A$" & CStr(dbBtmBorder&)

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WkJV.getCellRangeByName(RNM$).Rows.IsVisible = True
End Sub
Sub SortMW(ByVal iColPlus%, iColAdd%, iColDed%, iColPost%)
    Dim oCellRange as object
    Dim xRow&, StrxRow&, Col_BalBeg%, Col_Incre%, Col_Decre%, Col_BalEnd%
    Dim mFormula$
    Dim lAmount&, vColAdd%, vColDed%, vEnd&
    Col_BalBeg% = Col_Amount% + 1 + iColPlus%
    Col_Incre% = Col_Amount% + 2 + iColPlus%
    Col_Decre% = Col_Amount% + 3 + iColPlus%
    Col_BalEnd% = Col_Amount% + 4 + iColPlus%
    xRow& = CNRow%+2
    ClearRange aSheet, 3, Col_BalBeg%, dbBtmBorder&-2, Col_BalEnd%+2
    RNM$ = cna$ & CStr(CNRow% + 2) & cjc$
    RNM$ = RNM$ & Alpha(Col_BalEnd% + 4) & "$" & CStr(dbBtmBorder& - 2)
    Set oCellRange= aSheet.getCellRangeByName(RNM$)
    oCellRange.Rows.IsVisible = True
    SelectCell 1, xRow&

    Rem aController.FreezeAtPosition(Col_Descr, 2)
    Rem ----- (First step to sort in the order of PaidMo / other keys are irrelevant) -----
    If aSName$ = "MW" then
        SortPara oCellRange, KeyMW1, KeyMW2, KeyMW3 'Defined in VZ
    Elseif aSName$ = "AP" then
        SortPara oCellRange, KeyAP1, KeyAP2, KeyAP3 'Defined in VZ
    Elseif aSName$ = "AR" then
        SortPara oCellRange, KeyAR1, KeyAR2, KeyAR3 'Defined in VZ
    End If
    Rem -----
    Do While xRow& <= dbBtmBorder&-2
        lAmount& = CellValue(aSheet, xRow&, iColPost%)
        mFormula$ = "-" & CAlpha(Col_BalBeg%) & Cstr(xRow&) & "+" & CAlpha(Col_BalBeg% + 1)
        mFormula$ = mFormula$ & Cstr(xRow&) & "-" & CAlpha(Col_BalEnd% -1) & Cstr(xRow&)
        vColAdd%=CellValue(aSheet, xRow&, iColAdd%)
        vColDed%=CellValue(aSheet, xRow&, iColDed%)
        SelectCell xRow&, Col_BalBeg%
        If vColAdd% < cMonth% Then 'Accrued before current month
            If vColDed% < cMonth% Then 'Settled before current month
                StrxRow& = xRow&
                Do While (CellValue(aSheet, xRow&, iColAdd%) < cMonth%) And _
                    (CellValue(aSheet, xRow&, iColDed%) < cMonth%) And _
                    (xRow& <= dbBtmBorder& - 2)
                    xRow& = xRow& + 1
                Loop
                If StrxRow& <= xRow& then
                    RNM$ = cna$ & CStr(StrxRow&) & cjc$ & cna$ & CStr(xRow& - 1)
                    aSheet.getCellRangeByName(RNM$).Rows.IsVisible = False
                    If xRow& = dbBtmBorder& - 1 then
                        Exit do
                    Else
                        xRow& = xRow& - 1
                    End If
                End If
            elseif vColDed% = cMonth% Then 'Settled current month = nil balance
                SetCellValue aSheet, xRow&, Col_BalBeg%, lAmount&
                SetCellValue aSheet, xRow&, Col_Decre%, lAmount&
                SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
            elseif vColDed% > cMonth% Then 'Settled after current month
                SetCellValue aSheet, xRow&, Col_BalBeg%, lAmount&
                SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
                PostRAct xRow&, lAmount&, Col_BalEnd%
            End If
        Elseif vColAdd% = cMonth% Then 'Accrued current month
            SetCellValue aSheet, xRow&, Col_Incre%, lAmount&
            If vColDed% < cMonth% Then 'Settled before current month = nil balance
                SetCellValue aSheet, xRow&, Col_BalBeg%, -lAmount&
            elseif vColDed% = cMonth% Then 'Settled current month = nil balance
                SetCellValue aSheet, xRow&, Col_Decre%, lAmount&
            elseif vColDed% > cMonth% Then 'Settled after current month
                Rem Do Nothing
            End If
        End While
    End Sub

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141 WkJV.Range(RNM$).EntireRow.Hidden = False
142 End Sub
143 Sub SortMW(ByVal iColPlus%, iColAdd%, iColDed%, iColPost%)
144     Dim oCellRange As Range
145     Dim xRow&, StrxRow&, Col_BalBeg%, Col_Incre%, Col_Decre%, Col_BalEnd%
146     Dim mFormula$
147     Dim lAmount&, vColAdd%, vColDed%, vEnd&
148     Col_BalBeg% = Col_Amount + 1 + iColPlus%
149     Col_Incre% = Col_Amount + 2 + iColPlus%
150     Col_Decre% = Col_Amount + 3 + iColPlus%
151     Col_BalEnd% = Col_Amount + 4 + iColPlus%
152     xRow& = CNRow% + 2
153     ClearRange aSheet, 3, Col_BalBeg%, dbBtmBorder& - 2, Col_BalEnd% + 2
154     RNM$ = "$A$" & CStr(CNRow% + 2) & "-"
155     RNM$ = RNM$ & CAlpha(Col_BalEnd% + 4) & "$" & CStr(dbBtmBorder& - 2)
156     Set oCellRange = aSheet.Range(RNM$)
157     oCellRange.EntireRow.Hidden = False
158     SelectCell xRow&, 1
159     SelectCell 3, Col_Descr% + 1
160     ActiveWindow.FreezePanes = True
161     Rem ----- (First step to sort in the order of PaidMo / other keys are irrelevant) -----
162     If aSName$ = "MW" Then
163         SortPara oCellRange, KeyMW1, KeyMW2, KeyMW3 'Defined in VZ
164     Elseif aSName$ = "AP" Then
165         SortPara oCellRange, KeyAP1, KeyAP2, KeyAP3 'Defined in VZ
166     Elseif aSName$ = "AR" Then
167         SortPara oCellRange, KeyAR1, KeyAR2, KeyAR3 'Defined in VZ
168     End If
169     Rem -----
170     Do While xRow& <= dbBtmBorder& - 2
171         lAmount& = CellValue(aSheet, xRow&, iColPost%)
172         mFormula$ = "=RC[-3]+RC[-2]-RC[-1]"
173
174         vColAdd% = CellValue(aSheet, xRow&, iColAdd%)
175         vColDed% = CellValue(aSheet, xRow&, iColDed%)
176         SelectCell xRow&, Col_BalBeg%
177         If vColAdd% < cMonth% Then 'Accrued before current month
178             If vColDed% < cMonth% Then 'Settled before current month
179                 StrxRow& = xRow&
180                 Do While (CellValue(aSheet, xRow&, iColAdd%) < cMonth%) And _
181                     (CellValue(aSheet, xRow&, iColDed%) < cMonth%) And _
182                     (xRow& <= dbBtmBorder& - 2)
183                     xRow& = xRow& + 1
184                 Loop
185                 If StrxRow& <= xRow& Then
186                     RNM$ = "$A$" & CStr(StrxRow&) & "-$A$" & CStr(xRow& - 1)
187                     aSheet.Range(RNM$).EntireRow.Hidden = True
188                     If xRow& = dbBtmBorder& - 1 Then
189                         Exit Do
190                     Else
191                         xRow& = xRow& - 1
192                     End If
193                 End If
194             Elseif vColDed% = cMonth% Then 'Settled current month = nil balance
195                 SetCellValue aSheet, xRow&, Col_BalBeg%, lAmount&
196                 SetCellValue aSheet, xRow&, Col_Decre%, lAmount&
197                 SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
198             Elseif vColDed% > cMonth% Then 'Settled after current month
199                 SetCellValue aSheet, xRow&, Col_BalBeg%, lAmount&
200                 SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
201                 PostRAct xRow&, lAmount&, Col_BalEnd%
202             End If
203         Elseif vColAdd% = cMonth% Then 'Accrued current month
204             SetCellValue aSheet, xRow&, Col_Incre%, lAmount&
205             If vColDed% < cMonth% Then 'Settled before current month = nil balance
206                 SetCellValue aSheet, xRow&, Col_BalBeg%, -lAmount&
207             Elseif vColDed% = cMonth% Then 'Settled current month = nil balance
208                 SetCellValue aSheet, xRow&, Col_Decre%, lAmount&
209             Elseif vColDed% > cMonth% Then 'Settled after current month
210                 Rem Do Nothing
211             End If
212         End While
213     End Sub

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        PostRAct xRow&, lAmount&, Col_BalEnd%
    end if
    SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
    Elseif vColAdd% > cMonth% Then 'Accrued after current month
    if vColDed% > cMonth% Then 'Settled after current month
        StrxRow& = xRow&
        Do While CellValue(aSheet, xRow&, iColAdd%) > cMonth% And _
            CellValue(aSheet, xRow&, iColDed%) > cMonth% And _
                xRow& <= dbBtmBorder& - 2
            xRow& = xRow& + 1
        Loop
        If StrxRow& <= xRow& then
            RNM$ = cna$ & CStr(StrxRow&) & cjc$ & cna$ & CStr(xRow& - 1)
            aSheet.getCellRangeByName(RNM$).Rows.IsVisible = False
            if xRow& = dbBtmBorder& - 1 then
                Exit do
            else
                xRow& = xRow& - 1
            end if
        End If
    elseif vColDed% < cMonth% Then 'Settled before current month
        SetCellValue aSheet, xRow&, Col_BalBeg%, -lAmount&
        SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
        PostRAct xRow&, -lAmount&, Col_BalEnd%
    elseif vColDed% = cMonth% Then 'Settled current month
        SetCellValue aSheet, xRow&, Col_Decre%, lAmount&
        SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
        PostRAct xRow&, -lAmount&, Col_BalEnd%
    end if
End If
xRow& = xRow& + 1
Loop
RNM$ = cna$ & CStr(dbBtmBorder& - 1) & cjc$ & cna$ & CStr(dbBtmBorder& + 2)
aSheet.getCellRangeByName(RNM$).Rows.IsVisible = True
aController.ActiveSheet = WkBK
aController.ActiveSheet = aSheet
End Sub
Sub SortLN(ByVal strtRow%)
    dim aSortFields(2) As New com.sun.star.util.SortField
    dim aSortDesc(5) As New com.sun.star.beans.PropertyValue
    dim aLocale As New com.sun.star.lang.Locale
    dim oSortRange as object, LNEndRow&
    aLocale.Language = "ja" 'Japanese
    aLocale.Country = "JP" 'JAPAN
    LNEndRow& = LNEndLN(4)
    Rem ===(Note that dbBtmBorder in Lense row is counted on a one base)=====
    RNM$ = cna$ & CStr(strtRow%) & cjc$ & Calpha(10+NumDpt) & Cstr(LNEndRow&)
    Set oSortRange= WkLN.getCellRangeByName(RNM$)
    Rem -----
    aSortFields(0).Field = 3
    aSortFields(0).SortAscending = True
    aSortFields(1).Field = 1
    aSortFields(1).SortAscending = True
    aSortFields(2).Field = 0
    aSortFields(2).SortAscending = True
    aSortDesc(0).Name = "SortFields"
    aSortDesc(0).Value = aSortFields()
    aSortDesc(1).Name = "ContainsHeader"
    aSortDesc(1).Value = false
    aSortDesc(2).Name = "IsCaseSensitive"
    aSortDesc(2).Value = False
    aSortDesc(3).Name = "IsSortColumns"
    aSortDesc(3).Value = False
    aSortDesc(4).Name = "CollatorLocale"
    aSortDesc(4).Value = aLocale
    aSortDesc(5).Name = "CollatorAlgorithm"
    aSortDesc(5).Value = "charset"
    oSortRange.sort( aSortDesc() )
End Sub
Sub SortPara(ByVal oSortRange as object, key0%, key1%, key2%)

```

```

        PostRAct xRow&, lAmount&, Col_BalEnd%
    End If
    SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
    Elseif vColAdd% > cMonth% Then 'Accrued after current month
    If vColDed% > cMonth% Then 'Settled after current month
        StrxRow& = xRow&
        Do While CellValue(aSheet, xRow&, iColAdd%) > cMonth% And _
            CellValue(aSheet, xRow&, iColDed%) > cMonth% And _
                xRow& <= dbBtmBorder& - 2
            xRow& = xRow& + 1
        Loop
        If StrxRow& <= xRow& Then
            RNM$ = "$A$" & CStr(StrxRow&) & ":$A$" & CStr(xRow& - 1)
            aSheet.Range(RNM$).EntireRow.Hidden = True
            If xRow& = dbBtmBorder& - 1 Then
                Exit Do
            Else
                xRow& = xRow& - 1
            End If
        End If
    Elseif vColDed% < cMonth% Then 'Settled before current month
        SetCellValue aSheet, xRow&, Col_BalBeg%, -lAmount&
        SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
        PostRAct xRow&, -lAmount&, Col_BalEnd%
    Elseif vColDed% = cMonth% Then 'Settled current month
        SetCellValue aSheet, xRow&, Col_Decre%, lAmount&
        SetCellFormula aSheet, xRow&, Col_BalEnd%, mFormula$
        PostRAct xRow&, -lAmount&, Col_BalEnd%
    End If
End If
xRow& = xRow& + 1
Loop
RNM$ = "$A$" & CStr(dbBtmBorder& - 1) & ":$A$" & CStr(dbBtmBorder& + 2)
aSheet.Range(RNM$).EntireRow.Hidden = False
End Sub
Sub SortLN(ByVal StrtRow%)
    Dim oSortRange As Range, LNEndRow&
    LNEndRow& = LNEndLN(4)
    Rem ===(Note that dbBtmBorder in Lense row is counted on a one base)=====
    RNM$ = "$A$" & CStr(StrtRow%) & ":$" & Calpha(10 + NumDpt) & CStr(LNEndRow&)
    Set oSortRange = WkLN.Range(RNM$)
    Rem -----
    oSortRange.Sort key1:=Columns(4), Order1:=xlAscending, _
        key2:=Columns(2), Order2:=xlAscending, _
        Key3:=Columns(1), Order3:=xlAscending, _
        Header:=xlGuess, OrderCustom:=1, MatchCase:=False, _
        Orientation:=xlTopToBottom, SortMethod:=xlPinYin
End Sub
Sub SortPara(ByVal oSortRange As Range, key0%, key1%, key2%)

```

```

dim aSortFields(2) As New com.sun.star.util.SortField
dim aSortDesc(5) As New com.sun.star.beans.PropertyValue
dim aLocale As New com.sun.star.lang.Locale
aLocale.Language = "ja" 'Japanese
aLocale.Country = "JP" 'JAPAN
aSortFields(0).Field = Key0%-1
aSortFields(0).SortAscending = True
aSortFields(1).Field = key1%-1
aSortFields(1).SortAscending = True
aSortFields(2).Field = key2%-1
aSortFields(2).SortAscending = True
aSortDesc(0).Name = "SortFields"
aSortDesc(0).Value = aSortFields()
aSortDesc(1).Name = "ContainsHeader"
aSortDesc(1).Value = false
aSortDesc(2).Name = "IsCaseSensitive"
aSortDesc(2).Value = False
aSortDesc(3).Name = "IsSortColumns"
aSortDesc(3).Value = False
aSortDesc(4).Name = "CollatorLocale"
aSortDesc(4).Value = aLocale
aSortDesc(5).Name = "CollatorAlgorithm"
aSortDesc(5).Value = "charset"
oSortRange.sort( aSortDesc() )
End Sub
Sub PostRAct(ByVal fRow&, ByVal fvEnd&, ByVal fCol_BalEnd%)
    If aSName$="AP" Then
        If fvEnd& <> 0 Then
            If A_VAllocCD(CellValue(aSheet, fRow&, Col_ActCD)) Then
                SetCellValue aSheet, fRow&, fCol_BalEnd%+1, fvEnd&
            Else
                SetCellValue aSheet, fRow&, fCol_BalEnd%+2, fvEnd&
            End If
        End If
    ElseIf aSName$="AR" Then
        If fvEnd&>0 then
            SetCellValue aSheet, fRow&, fCol_BalEnd%+1, fvEnd&
        ElseIf fvEnd&<0 Then
            SetCellValue aSheet, fRow&, fCol_BalEnd%+2, fvEnd&
        End If
    End If
End Sub
Function LNEndLN%(ByVal StartLN%)
    LNEndLN% = StartLN%
    Do While Len(CellString(WkLN, LNEndLN%, 1)) > 0
        LNEndLN% = LNEndLN% + 1
    Loop
    If LNEndLN% -1 >=StartLN% then
        LNEndLN% = LNEndLN% -1
    Else
        LNEndLN% = StartLN%
    End If
End Function

```

```

281 oSortRange.Sort key1:=Columns(key0%), Order1:=xlAscending, _
282 key2:=Columns(key1%), Order2:=xlAscending, _
283 Key3:=Columns(key2%), Order3:=xlAscending, _
284 Header:=xlGuess, OrderCustom:=1, MatchCase:=False, _
285 Orientation:=xlTopToBottom, SortMethod:=xlPinYin
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305 End Sub
306 Sub PostRAct(ByVal fRow&, ByVal fvEnd&, ByVal fCol_BalEnd%)
307     If aSName$ = "AP" Then
308         If fvEnd& <> 0 Then
309             If A_VAllocCD(CellValue(aSheet, fRow&, Col_ActCD)) Then
310                 SetCellValue aSheet, fRow&, fCol_BalEnd% + 1, fvEnd&
311             Else
312                 SetCellValue aSheet, fRow&, fCol_BalEnd% + 2, fvEnd&
313             End If
314         End If
315     ElseIf aSName$ = "AR" Then
316         If fvEnd& > 0 Then
317             SetCellValue aSheet, fRow&, fCol_BalEnd% + 1, fvEnd&
318         ElseIf fvEnd& < 0 Then
319             SetCellValue aSheet, fRow&, fCol_BalEnd% + 2, fvEnd&
320         End If
321     End If
322 End Sub
323 Function LNEndLN%(ByVal StartLN%)
324     LNEndLN% = StartLN%
325     Do While Len(CellString(WkLN, LNEndLN%, 1)) > 0
326         LNEndLN% = LNEndLN% + 1
327     Loop
328     If LNEndLN% - 1 >= StartLN% Then
329         LNEndLN% = LNEndLN% - 1
330     Else
331         LNEndLN% = StartLN%
332     End If
333 End Function

```