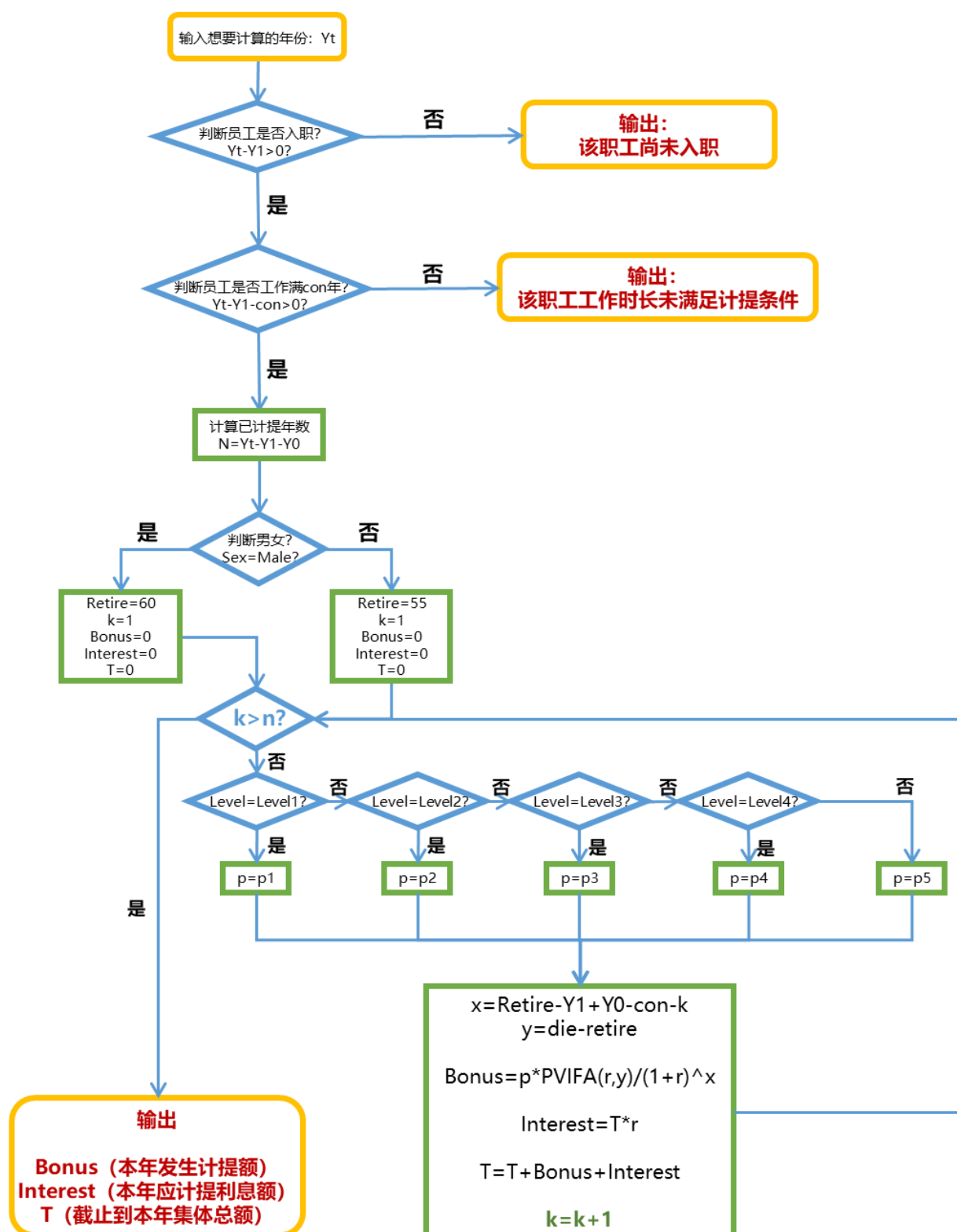# 1712480-周雅南-计算机会计期末作业说明

目录

==注:==

本次作业另附==讲解视频==，里面展示了该程序的 excel 操作过程，便于老师对程序的快速了解，望老师可以观看一下该视频，谢谢老师！

我设置的设定收益计划规则是==当员工工作满 x 年后才开始对其实施设定收益计划（如 x=3，则从工作第 4 年开始才是设定受益计划的第一年）==，视频中的 x 是 10 年，可能有些大了不太实际，可以在 rules 里对条件进行调整，改成 0/1/2/3/4......都可以，程序会自动识别。
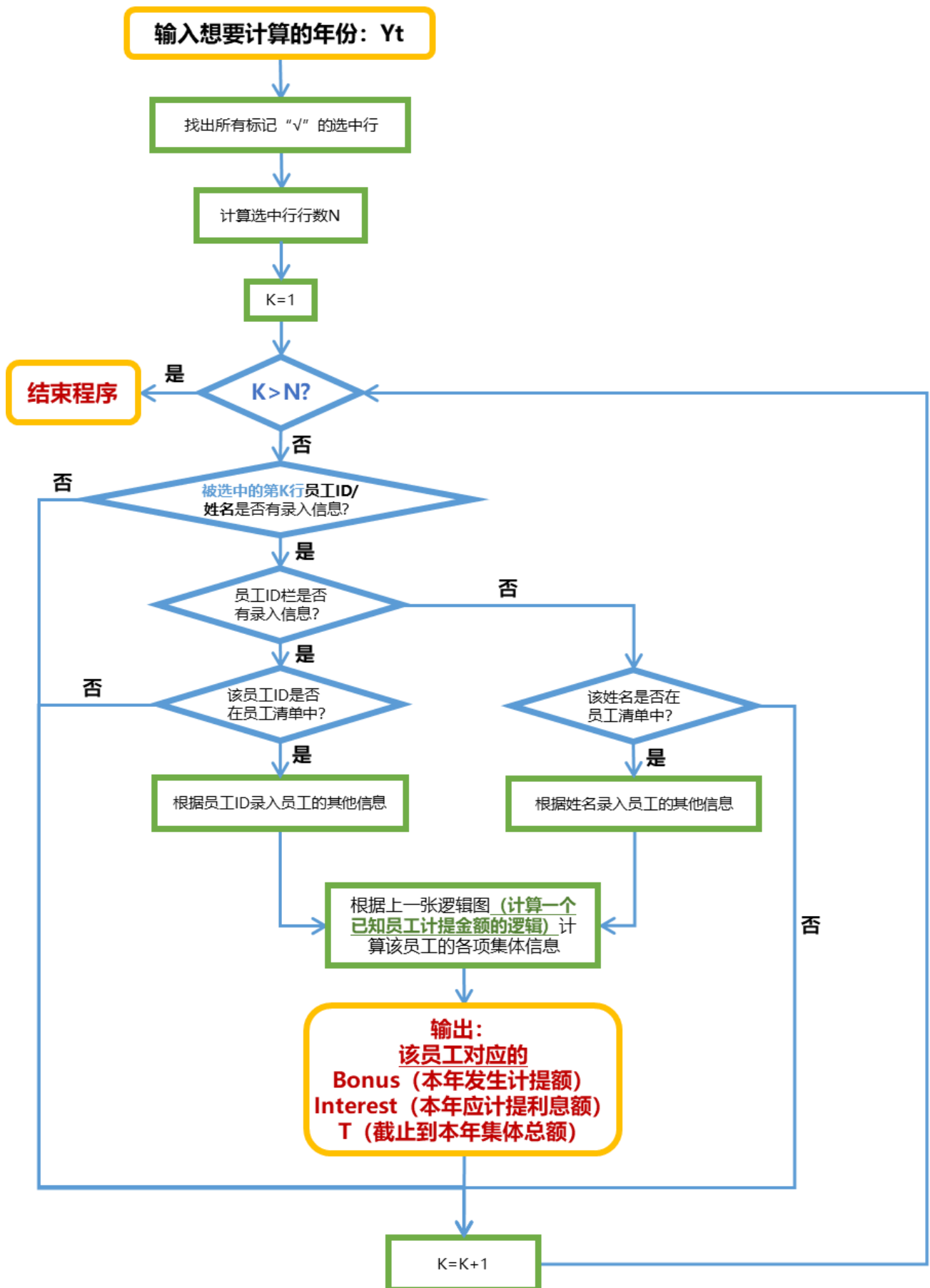
一．逻辑图展示

1. 逻辑图 1：计算一个已知员工计提金额的逻辑

Y0=出生年份，Y1=入职年份，Level=员工等级， con=收益计划须满足的条件工作年数，die=死亡年龄，
retire=退休年龄，Sex=性别，p1/p2/p3/p4/p5=各等级员工对应的退休年金数额，
Yt=想要计算的年份，n=已计提年数

2. 逻辑图 2：计算多个员工计提金额的逻辑

```
输入想要计算的年份：Yt
        ↓
找出所有标记"√"的选中行
        ↓
计算选中行行数N
        ↓
       K=1
        ↓
    K＞N?  ——是——→ 结束程序
        ↓否
被选中的第K行员工ID/
姓名是否有录入信息?  ——否——→
        ↓是
员工ID栏是否
有录入信息?  ——否——→  该姓名是否在
        ↓是              员工清单中?  ——否——→
该员工ID是否              ↓是
在员工清单中?  ——否——→   根据姓名录入员工的其他信息
        ↓是
根据员工ID录入员工的其他信息
        ↓
根据上一张逻辑图（计算一个
已知员工计提金额的逻辑）计
算该员工的各项集体信息
        ↓
输出：
该员工对应的
Bonus（本年发生计提额）
Interest（本年应计提利息额）
T（截止到本年集体总额）
        ↓
     K=K+1
```

二．代码展示

1. 表单："DefinedBenefitPlan(只可以查单人)"控件代码

(1) "计算"按钮（窗体控件）：

```
Sub definedBenefitPlans()

Level = Range("C8").Value
r = Sheets("rules").Range("D3").Value
m = Application.InputBox("Please enter the YEAR you want to compute: ", 3)
If m = False Then
Exit Sub
End If

Range("c11") = m
worktime = Range("c11").Value - Range("c10").Value
p1 = Sheets("rules").Range("d4").Value
p2 = Sheets("rules").Range("d5").Value
p3 = Sheets("rules").Range("d6").Value
p4 = Sheets("rules").Range("d7").Value
p5 = Sheets("rules").Range("d8").Value
con = Sheets("rules").Range("d9").Value
die = Range("c9").Value

If worktime < 0 Then
K = MsgBox("This clerk HAS NOT BEEN IN our company by " & Range("c11").Value, vbOKCancel)

If K = vbCancel Then
Exit Sub
End If

Range("c12") = "-"
Range("c13") = "-"
Range("c14") = "-"
Else
  If worktime < con Then
  l = MsgBox("The length of employment of this clerk DOES NOT MEET the requirement.", vbOKCancel)
  If l = vbCancel Then
  Exit Sub
  End If
```

```
Range("c12") = "-"
Range("c13") = "-"
Range("c14") = "-"

Else
n = Range("c11").Value - Range("c10").Value - con
  If n = 0 Then
    l = MsgBox("The length of employment of this clerk DOES NOT MEET the requirement.", vbOKCancel)
    If l = vbCancel Then
      Exit Sub
    End If
  Exit Sub
  End If

t = 0
interest = 0
bonus1 = 0
  If Range("c7").Value = "Male" Then
  retire = 60
  For i = 1 To n
    If Level = "Level1" Then
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p1, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - i)
    interest = t * r
    t = t + interest + bonus1

    ElseIf Level = "Level2" Then
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p2, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - i)
    interest = t * r
    t = t + interest + bonus1

    ElseIf Level = "Level3" Then
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p3, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - i)
    interest = t * r
    t = t + interest + bonus1

    ElseIf Level = "Level4" Then
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p4, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - i)
```

```
interest = t * r
t = t + interest + bonus1


Else
bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p5, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - i)
interest = t * r
t = t + interest + bonus1
End If
Next i


S = MsgBox("The amount of BONUS FOR THIS YEAR is " & Format(bonus1, "#.##"), vbOKCancel)
If S = vbCancel Then
Exit Sub
End If


p = MsgBox("The amount of INTEREST for this year is " & Format(interest, "#.##"), vbOKCancel)
If p = vbCancel Then
Exit Sub
End If


q = MsgBox("The TOTAL AMOUNT OF BONUS is " & Format(t, "#.##"), vbOKCancel)
If q = vbCancel Then
Exit Sub
End If


Range("c12") = Val(Format(bonus1, "#.##"))
Range("c13") = Val(Format(interest, "#.##"))
Range("c14") = Val(Format(t, "#.##"))


Else
For j = 1 To n
retire = 55
If Level = "Level1" Then
bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p1, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - j)
interest = t * r
t = t + interest + bonus1


ElseIf Level = "Level2" Then
bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p2, 0) / (r + 1) ^ (retire - Range("c10").Value +
```

```
Range("c6").Value - con - j)
    interest = t * r
    t = t + interest + bonus1


    ElseIf Level = "Level3" Then
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p3, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - j)
    interest = t * r
    t = t + interest + bonus1


    ElseIf Level = "Level4" Then
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p4, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - j)
    interest = t * r
    t = t + interest + bonus1


    Else
    bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p5, 0) / (r + 1) ^ (retire - Range("c10").Value +
Range("c6").Value - con - j)
    interest = t * r
    t = t + interest + bonus1


    End If
    Next j
    S = MsgBox("The amount of bonus for this year is " & Format(bonus1, "#.##"), vbOKCancel)
    If S = vbCancel Then
    Exit Sub
    End If


    p = MsgBox("The amount of interest for this year is " & Format(interest, "#.##"), vbOKCancel)
    If p = vbCancel Then
    Exit Sub
    End If


    q = MsgBox("The total amount of bonus is " & Format(t, "#.##"), vbOKCancel)
    If q = vbCancel Then
    Exit Sub
    End If
    Range("c12") = Val(Format(bonus1, "#.##"))
    Range("c13") = Val(Format(interest, "#.##"))
    Range("c14") = Val(Format(t, "#.##"))
```

```
   End If
  End If
End If

a = MsgBox("Do you want to display the ACCOUNTING ENTRY? ", vbOKCancel)
If a = vbCancel Then
Range("c15") = "-"
Range("c16") = "-"
Exit Sub
End If


Call entry11
End Sub
```

(2) 上述程序中调用的函数"entry11()":

```
Public Function entry11()

If Range("c12") = "-" Then
MsgBox ("There is no accounting entry for this clerk this year.")
Range("c15") = "-"
Range("c16") = "-"

Else
bonus1 = Range("c12").Value + Range("c13").Value
K = MsgBox("借：管理费用    " & bonus1, vbOKCancel)
If K = vbCancel Then
Range("c15") = "-"
Range("c16") = "-"
Exit Function
End If


m = MsgBox("贷：应付职工薪酬    " & bonus1, vbOKCancel)
If m = vbCancel Then
Range("c15") = "-"
Range("c16") = "-"
Exit Function
End If


Range("c15") = "借：管理费用        " & bonus1
```

```
Range("c16") = "     贷：应付职工薪酬           " & bonus1
End If


End Function
```

（3） "编制会计分录"按钮（窗体控件）：

```
Sub accountingEntry()
If Range("c12") = "-" Then
    MsgBox ("There is no accounting entry for this clerk this year.")
    Range("c15") = "-"
    Range("c16") = "-"
Else
    bonus1 = Range("c12").Value + Range("c13").Value
    K = MsgBox("借：管理费用     " & bonus1, vbOKCancel)
    If K = vbCancel Then
    Exit Sub
    End If


    m = MsgBox("贷：应付职工薪酬     " & bonus1, vbOKCancel)
    If m = vbCancel Then
    Exit Sub
    End If


    Range("c15") = "借：管理费用           " & bonus1
    Range("c16") = "     贷：应付职工薪酬           " & bonus1
End If
End Sub
```

2. 表单："DefinedBenefitPlan2(可以查多人)"控件代码

（1） 表单中双击显示"√"以及全选功能代码：

```
Private Sub Worksheet_BeforeDoubleClick(ByVal Target As Range, Cancel As Boolean)
If Target.Column = 1 Then
 If Not Target.Row = 3 Then
   If Target = "√" Then
   Target = ""
   ElseIf Target = "" Then
   Target = "√"
   End If
 Else
```

```
    If Target = "√" Then
     Target = ""
     For i = 1 To 160
     Range(Target.Address).Offset(i, 0) = ""
     Next i
    ElseIf Target = "" Then
     Target = "√"
     For i = 1 To 160
     Range(Target.Address).Offset(i, 0) = "√"
     Next i
    End If
   End If
  End If
End If
End Sub
```

(2) "查询"按钮（ActiveX 控件）：

```
Private Sub CommandButton1_Click()
Dim rng As Range
Dim SS(160) As Integer

r = Sheets("rules").Range("D3").Value
p1 = Sheets("rules").Range("d4").Value
p2 = Sheets("rules").Range("d5").Value
p3 = Sheets("rules").Range("d6").Value
p4 = Sheets("rules").Range("d7").Value
p5 = Sheets("rules").Range("d8").Value
con = Sheets("rules").Range("d9").Value

m = Application.InputBox("Please enter the YEAR you want to compute: ", 3)
If m = False Then
Exit Sub
End If

 With Worksheets("DefinedBenefitPlan2(可以查多人)").Range("a3:a164")
    Set c = .Find("√", LookIn:=xlValues)
    If Not c Is Nothing Then
        firstAddress = c.Address
        u = 1
        Do
            If Not Application.WorksheetFunction.And(c.Offset(0, 1).Value = "", c.Offset(0, 2).Value = "") Then
```

```
                SS(u) = c.Row - 3
                u = u + 1
              End If
               Set c = .FindNext(c)
              endAddress = c.Address
         Loop While Not endAddress = firstAddress
      End If
      If c Is Nothing Then
       MsgBox ("NONE of the clerks are selected! Please SELECT the clerks you want to compute!")
        Exit Sub
      End If
End With


lengthSS = Application.Count(SS)
K = 1
For i = 1 To lengthSS - 1
 If Not SS(i) = 0 Then
 K = K + 1
 End If
Next i


For y = 1 To K - 1
 Set rng = Range("b3").Offset(SS(y), 0).Resize(1, 2)
    If rng.Cells(1, 1).Value = "" Then
        With Sheets("员工信息").Range("b2:b158")
        Set f = .Find(rng.Cells(1, 2), LookIn:=xlValues)
         If f Is Nothing Then
         MsgBox (rng.Cells(1, 2).Value & " is NOT in the member list! Please CHECK YOUR SPELLING!")
         GoTo line1
         End If
        rng.Cells(1, 1) = f.Offset(0, -1).Value
        End With
       Else
        With Sheets("员工信息").Range("a2:a158")
        Set f = .Find(rng.Cells(1, 1), LookIn:=xlValues)
         If f Is Nothing Then
         MsgBox (rng.Cells(1, 1).Value & " is NOT in the member list! Please CHECK YOUR SPELLING!")
         GoTo line1
         End If
        rng.Cells(1, 2) = f.Offset(0, 1).Value
        End With
```

```
    End If


    Range("d3").Offset(SS(y), 0) = m
    Range("e3").Offset(SS(y), 0) = Application.WorksheetFunction.VLookup(rng.Cells(1, 1).Value, Sheets("员工
信息").Range("a2:g158"), 3, False)
    Range("f3").Offset(SS(y), 0) = Application.WorksheetFunction.VLookup(rng.Cells(1, 1).Value, Sheets("员工
信息").Range("a2:g158"), 4, False)
    Range("g3").Offset(SS(y), 0) = Application.WorksheetFunction.VLookup(rng.Cells(1, 1).Value, Sheets("员工
信息").Range("a2:g158"), 5, False)
    Range("h3").Offset(SS(y), 0) = Application.WorksheetFunction.VLookup(rng.Cells(1, 1).Value, Sheets("员工
信息").Range("a2:g158"), 6, False)
    Range("i3").Offset(SS(y), 0) = Application.WorksheetFunction.VLookup(rng.Cells(1, 1).Value, Sheets("员工
信息").Range("a2:g158"), 7, False)


    Level = Range("g3").Offset(SS(y), 0).Value
    worktime = Range("d3").Offset(SS(y), 0).Value - Range("i3").Offset(SS(y), 0).Value
    die = Range("h3").Offset(SS(y), 0).Value


    If worktime < 0 Then
      Range("j3").Offset(SS(y), 0) = "-"
      Range("k3").Offset(SS(y), 0) = "-"
      Range("l3").Offset(SS(y), 0) = "-"
    End If


    If worktime < con Then
      Range("j3").Offset(SS(y), 0) = "-"
      Range("k3").Offset(SS(y), 0) = "-"
      Range("l3").Offset(SS(y), 0) = "-"
    End If


    n = m - Range("i3").Offset(SS(y), 0).Value - con
      If n = 0 Then
        Range("j3").Offset(SS(y), 0) = "-"
        Range("k3").Offset(SS(y), 0) = "-"
        Range("l3").Offset(SS(y), 0) = "-"
      End If


    t = 0
    interest = 0
    bonus1 = 0
      If Range("f3").Offset(SS(y), 0).Value = "Male" Then
```

```
    retire = 60
    For o = 1 To n
    If Level = "Level1" Then
     bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p1) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - o)
     interest = t * r
     t = t + interest + bonus1


    ElseIf Level = "Level2" Then
     bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p2) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - o)
     interest = t * r
     t = t + interest + bonus1


    ElseIf Level = "Level3" Then
     bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p3) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - o)
     interest = t * r
     t = t + interest + bonus1


    ElseIf Level = "Level4" Then
     bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p4) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - o)
     interest = t * r
     t = t + interest + bonus1


    Else
     bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p5) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - o)
     interest = t * r
     t = t + interest + bonus1
    End If
    Next o

    Range("j3").Offset(SS(y), 0) = Val(Format(bonus1, "#.##"))
    Range("k3").Offset(SS(y), 0) = Val(Format(interest, "#.##"))
    Range("l3").Offset(SS(y), 0) = Val(Format(t, "#.##"))

   Else
   For j = 1 To n
   retire = 55
```

```
        If Level = "Level1" Then
         bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p1) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - j)
         interest = t * r
         t = t + interest + bonus1

        ElseIf Level = "Level2" Then
         bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p2) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - j)
         interest = t * r
         t = t + interest + bonus1

        ElseIf Level = "Level3" Then
         bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p3) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - j)
         interest = t * r
         t = t + interest + bonus1

        ElseIf Level = "Level4" Then
         bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p4) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - j)
         interest = t * r
         t = t + interest + bonus1

        Else
         bonus1 = Application.WorksheetFunction.PV(r, die - retire, -p5) / (r + 1) ^ (retire -
Range("i3").Offset(SS(y), 0).Value + Range("e3").Offset(SS(y), 0).Value - con - j)
         interest = t * r
         t = t + interest + bonus1
        End If
        Next j

        Range("j3").Offset(SS(y), 0) = Val(Format(bonus1, "#.##"))
        Range("k3").Offset(SS(y), 0) = Val(Format(interest, "#.##"))
        Range("l3").Offset(SS(y), 0) = Val(Format(t, "#.##"))
       End If
line1:
     Next y

a = MsgBox("Do you want to display the ACCOUNTING ENTRY? ", vbOKCancel)
If a = vbCancel Then
```

```
Exit Sub
End If


For Z = 1 To K - 1
t = SS(Z)
Call entry2(t)
Next Z


MsgBox ("FINISHED!")


End Sub
```

(3)　"清空"按钮（ActiveX 控件）：

```
Private Sub CommandButton2_Click()
Range("b4:n20000").ClearContents
End Sub
```

(4)　"编制分录"按钮（ActiveX 控件）：

```
Private Sub 编制会计分录_Click()
Dim rng As Range
Dim SS(160) As Integer

 With Worksheets("DefinedBenefitPlan2(可以查多人)").Range("a3:a164")
    Set c = .Find("√", LookIn:=xlValues)
    If Not c Is Nothing Then
        firstAddress = c.Address
        u = 1
        Do
            If Not Application.WorksheetFunction.And(c.Offset(0, 1).Value = "", c.Offset(0, 2).Value = "") Then
              SS(u) = c.Row - 3
              u = u + 1
            End If
             Set c = .FindNext(c)
            endAddress = c.Address
        Loop While Not endAddress = firstAddress
    End If
    If c Is Nothing Then
     MsgBox ("NONE of the clerks are selected! Please SELECT the clerks you want to compute!")
     Exit Sub
```

```
      End If
End With

lengthSS = Application.Count(SS)
K = 1
For i = 1 To lengthSS - 1
 If Not SS(i) = 0 Then
 K = K + 1
 End If
Next i

For Z = 1 To K - 1
t = SS(Z)
Call entry2(t)
Next Z

End Sub
```

(5)　上述过程中用到的函数 entry2(t)：

```
Public Function entry2(t)
If Range("j3").Offset(t, 0).Value = "-" Then
   Range("m3").Offset(t, 0) = "-"
   Range("n3").Offset(t, 0) = "-"
Else
   bonus1 = Range("j3").Offset(t, 0).Value + Range("k3").Offset(t, 0).Value
   Range("m3").Offset(t, 0) = "借：管理费用        " & bonus1
   Range("n3").Offset(t, 0) = "贷：应付职工薪酬        " & bonus1
End If
End Function
```