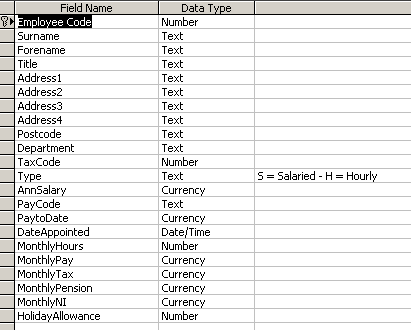
# Payroll – VBA Programming Exercise

A database **Employee Exercise.accdb** has been setup. Employees are either paid each month. Some employees are paid an hourly rate will others are paid an annual salary which is divided into 12 equal amounts.

Below is a copy of the employee record in design view.



A sub program has been written to perform a payroll run which is contained in the module EmployeeModule. At present all it does is calculate the **MonthlyPay** for those employees with a **Type** = “H”. The Payroll code is run using a command button which has been placed on the form frmSwitch.

The code is displayed below:

Public Sub Payroll()

Dim db As DAO.Database

Dim rsEmployee As DAO.Recordset

Dim rsPayRates As DAO.Recordset

Dim PayRate(1 To 9) As Currency

Dim HourlyRate As Currency

Dim C As Integer

Set db = CurrentDb()

'Reading the Pay Rates into

Set rsPayRates = db.OpenRecordset("Select \* from PayRates", dbOpenDynaset)

rsPayRates.MoveFirst

For C = 1 To 9

PayRate(C) = rsPayRates![Hourly Rate]

rsPayRates.MoveNext

Next C

rsPayRates.Close

Set rsEmployee = db.OpenRecordset("Select \* from Employees", dbOpenDynaset)

rsEmployee.MoveFirst

Do Until rsEmployee.EOF

rsEmployee.Edit

If rsEmployee![Type] = "H" Then

Select Case rsEmployee![PayCode]

Case "A"

HourlyRate = PayRate(1)

Case "B"

HourlyRate = PayRate(2)

Case "C"

HourlyRate = PayRate(3)

Case "D"

HourlyRate = PayRate(4)

Case "E"

HourlyRate = PayRate(5)

Case "F"

HourlyRate = PayRate(6)

Case "G"

HourlyRate = PayRate(7)

Case "H"

HourlyRate = PayRate(8)

Case "I"

HourlyRate = PayRate(9)

End Select

rsEmployee![MonthlyPay] = HourlyRate \* rsEmployee![MonthlyHours]

ElseIf rsEmployee![Type] = "S" Then

'Place the code here to deal with the salaried employees

'Only one line of code is necessary

End If

'Place the code here to deal with: -

' MonthlyNI

' MonthlyPension

' MonthlyTax

rsEmployee.Update

rsEmployee.MoveNext

Loop

rsEmployee.Close

MsgBox "Payroll Complete", vbOKOnly, "Payroll"

End Sub

# Tasks – Employee Database

1. Add the code needed to work out the MonthlyPay for the salaried employees   
   (Type = “S”).
2. Add code to calculate the MonthlyNI (Monthly National Insurance) this is calculated as follows: - MonthlyNI = 0.1 \* MonthlyPay.
3. Add code to calculate the MonthlyPension which is calculated as follows: -  
   MonthlyPension = MonthlyPay \*0.06.
4. Add code to calculate the MonthlyTax which is calculated as follows: -  
   MonthlyTax = (MonthlyPay\*12 – TaxCode) \* 0.27 /12.
5. Write a new sub program AnnualHoliday() to calculate the amount of holiday each employee gets. The code should be run using a command button placed on the form frmSwitch. The HolidayAllowance is to be set according to the number of years of service as follow: -  
     
   0 years – 20 days  
   1 year – 21 days  
   2 years – 22 days  
   3 years – 24 days  
   4 years – 25 days  
   5 or more years – 30 days

You will need to use the **DateDiff** function in your code.

1. Add the facility to generate the Employee Payslips.

# Tasks – Grades Database

Add a facility to calculate the AS and A2 Totals and Grades to all the records in the Grades tables.

The AS Total is calculated by adding together the COMP1 and COMP2 marks which gives a total out of 200.

The A2 Total is calculated by adding together all four marks giving a total out of 400.

The grades are based on the percentage figure. Grades are allocated as should in the table below.

|  |  |
| --- | --- |
| **Percentage** | **Grade** |
| Less than 40% | U |
| 40 – 49 | E |
| 50 – 59 | D |
| 60 – 69 | C |
| 70 – 79 | B |
| 80 and over | A |

To be awarded and A\* at A2 you must achieved an A grade overall and get 90% or over in the A” modules (COMP3 and COMP4).