Program Examples

```
‘
‘----------------------------------------------------------------------------------------------------------------------
'
MsgBox "Hello World"
‘
‘----------------------------------------------------------------------------------------------------------------------
'
a = 3                                   ' Pythagoras's Theorem
b = 4
sqrt(a^2 + b^2)                         ‘ Hypotenuse
‘
‘----------------------------------------------------------------------------------------------------------------------
'
Ask "Enter the number: ",num
If(num < 5) then
        MsgBox “The number was less than 5”
Endif
‘
‘----------------------------------------------------------------------------------------------------------------------
'
Ask "Enter the number: ",num
If(num < 5) then
        MsgBox "The number was less than 5"
Elseif (num < 10) then
        MsgBox "The number was between 5 and 10"
Else
        MsgBox "The number was 10 or greater"
Endif
‘
‘----------------------------------------------------------------------------------------------------------------------
'
s1$ = "There is always something you miss"
loc$ = mid(s1$,3,10)
MsgBox loc$
‘ Answer is: ere is alw
‘
‘----------------------------------------------------------------------------------------------------------------------
'
s1$ = "There is always something you miss"
loc$ = left(s1$,10)
MsgBox loc$
‘ Answer is: There is a
‘
‘----------------------------------------------------------------------------------------------------------------------
'
s1$ = "There is always something you miss"
loc$ = right(s1$,10)
MsgBox loc$
‘ Answer is: g you miss
‘
‘----------------------------------------------------------------------------------------------------------------------
'
n = asc("A")
MsgBox n
‘ Answer is: 65
‘
‘----------------------------------------------------------------------------------------------------------------------
'
m$ = chr(66)
MsgBox m$
‘Answer is: B
```

```
‘
‘-------------------------------------------------------------------------------------------------------------------------
'
numBags = 6
m$ = str(numBags,"Includes %lg bags of fasteners")
MsgBox m$
‘ Answer is:   Includes 6 bags of fasteners
‘
‘-------------------------------------------------------------------------------------------------------------------------
'
cutLength = 6.2
m$ = str(cutLength,"Cut Length %.3f metres")
MsgBox m$
‘ Answer is:   Cut Length 6.200 metres
‘ Note the %.3f denotes a floating point number with 3 decimal places
‘
‘-------------------------------------------------------------------------------------------------------------------------
'
v$ = "55.8"                ‘ v$ is a string variable
dd = val(v$)               ‘ dd is a floating point number
dHalf = dd/2               ‘ Now half the value of dd
MsgBox dHalf
‘Answer is: 27.9
‘
‘-------------------------------------------------------------------------------------------------------------------------
'
' Macro: WhileProd.mac
fnum = 0
i = 1
while (i <= 10)
   fnum = fnum + i
   ‘ Increment counter
   i++
endwhile
‘
MsgBox "Total number: %g",fnum
 ‘
‘-------------------------------------------------------------------------------------------------------------------------
'
' Macro: ForProd.mac
fnum = 0
for (i = 1; i <= 10; i++)
   fnum = fnum + i
endfor
‘
MsgBox "Total number: %g",fnum
‘
‘-------------------------------------------------------------------------------------------------------------------------
'
'
' Macro To Use A Function Call
'
function adder()
          '  Simple function to add two numbers together
          ivar = $1                ' first argument is put into $1 ie 10
          kvar = $2                ' second argument is put into $2 ie 20
          ires = ivar + kvar
          return(ires)       ' return the sum of the numbers to the calling macro
endfunction
'
' Main line of macro
i = 10                             ' Set two variables i and k
k = 20
```

```
' Call adder with the variables i and k
ires = adder(i,k) ' This will return the number 30
'
MsgBox ires                 ' Put the result of 30 on the screen
‘
‘-----------------------------------------------------------------------------------------------------------------------
'
'           File Write Example
'
filename$ = "C:\\devel\\eroof\\testout.txt"          ' filename - note requires two back slashes
between folder names
iLunw = open(filename$, "w")                                    ' Open file for writing and iLunw
is set to the Logical Unit Number for the file
if(iLunw) then
        write(iLunw, "Hello World\n")                           ' write line - note the New Line
character \n
        write(iLunw, "This is from a Macro\n")              ' write line
        close(iLunw)                                                    ' Close the file
else
        MsgBox "Error: Could Not Open .." + filename$
endif
‘
‘-----------------------------------------------------------------------------------------------------------------------
'
'           File Read Example
'
' filename - note requires two back slashes between folder names
filename$ = "C:\\devel\\eroof\\testin.txt"
' Open file for reading and iLunr is set to the Logical Unit Number or Handle for the file
iLunr = open(filename$, "r")
if(iLunr) then
        ReadNextLine_Flag = 1                   ' Set the Read Next Line Flag to true
        '           Now read the file one line at a time in following while loop
        while(ReadNextLine_Flag)
                sinput$ = read(iLunr, 512)          ' Read a line from the file - up to 512 chars per
line
                ' Check that the End Of File marker EOF$ has NOT been found
                if(NOT(searchstr(sinput$,EOF$))) then
                        MsgBox sinput$              ' Line read successfully
                        ‘
                        ' ... code here to process line ...
                        ‘
                else
                        ' End Of File marker encountered so Set ReadNextLine_Flag to false
                        ReadNextLine_Flag = 0
                        close(iLunr)                        ' Close the file
                endif
        endwhile
else
        MsgBox "Error: File Not Found .." + filename$
endif
‘
‘-----------------------------------------------------------------------------------------------------------------------
```