Let it snow…

This Excel file creates a fun snowfall for Christmas using a VBA macro.

Use

Start the snow by clicking the "Let it snow..." button. Each click runs the macro for 18 loops, so that new snow at the top reaches the bottom (row 18). You can continue the snowfall by clicking the "Let it snow..." button again or clear the snow by clicking on the "Clear snow" button. You can adjust the density of the snowfall using the spinner - if you set this to zero, no new snow is generated at the top, the existing snow falls to the ground and the snowfall ends.

Picture

The background picture is formed using narrow rows and columns. The text in all cells is formatted white. The snow is simply the * symbol. The worksheet is protected so that no cells can be selected, which could visually disturb the animation. This can be removed, if desired, using the Excel ribbon Review, then Unprotect sheet (no password).

Macro

The macro contains a double loop: one for the columns, another for the rows. For each column loop, the macro starts at the last row and copies the snowflake from the row above, if there is one. There is a special rule for the last row so that snow is added to (up to three snowflakes per cell) to create an effect of snow on the ground. Then the macro moves to the next row up and copies the snowflake from the row above, if there is one, and continues until it reaches the first row. When it gets to the first row, a random number decides if a new snowflake appears or not, based upon the snow density value set with the spinner. Then the macro moves to the second column and so on.

Have fun using!

© 2020 www.how2excel.com

The VBA (macro) Code

```
Option Explicit

Sub Clear_snow()

   Range("A1:X18").ClearContents

End Sub

Sub Let_it_snow()

Dim LastRow As Integer
Dim LastColumn As Integer
Dim SnowRow As Integer
Dim SnowColumn As Integer
Dim MyCount As Integer
Dim ModelCalcSetting As Long

   ModelCalcSetting = Application.Calculation
   Application.Calculation = xlCalculationManual
   Application.EnableEvents = False

LastRow = 18
LastColumn = 24

For MyCount = 1 To 18

   For SnowColumn = 1 To LastColumn

      'Update last row (the ground) first, add to snow if snow in row above
      If Cells(LastRow - 1, SnowColumn).Value = "*" And Len(Cells(LastRow,
SnowColumn).Value) < 3 Then
         Cells(LastRow, SnowColumn).Value = Cells(LastRow, SnowColumn).Value & "*"
      End If

      'Then update all other rows except row 1
      For SnowRow = LastRow - 1 To 2 Step -1
         If IsEmpty(Cells(SnowRow - 1, SnowColumn).Value) Then
            Cells(SnowRow, SnowColumn).ClearContents
         Else
            Cells(SnowRow, SnowColumn).Value = "*"
         End If
      Next SnowRow

      'Finally generate random snow in row 1 based upon snow density setting
      If Rnd() * 100 <= Range("Snow_density").Value Then
```

```
            Cells(1, SnowColumn).Value = "*"
        Else
            Cells(1, SnowColumn).ClearContents
        End If

    DoEvents

    Next SnowColumn

Next MyCount

Application.Calculation = ModelCalcSetting

End Sub
```

© 2020 www.how2excel.com