This is Part 4 of a 4 Part Series

What is a Checkbox?

All radiobuttons within the same window are seen as one radio-set, or group. From the helpfile

```
It is possible for only one radiobutton in a radio-set to be "set" at
one time. The groupbox allows the window to have multiple radio-sets
of radiobuttons. Only one of all radiobuttons in a groupbox will be
allowed to be in a set state. Click on one to set it, and all the
others will be reset.
```

In the demo being used for this tutorial, we'll define three groups (sun/cloud, yellow flower/pink flower, ladybug/caterpillar). Each of these pairs will be contained in a separate groupbox. The groupbox is declared before the window is opened:

```
GROUPBOX #handle.ext, "label", x, y, wide, high
```

All radiobuttons that lie within the groupbox will be recognized as being in the same radio-set. Notice that the code doesn't change. We have already included the Reset of the Other Radiobutton in the Set This Radiobutton code. But, now, we can see 3 distinct choices offered in the 3 sets of radiobuttons.

```
' Demo to Illustrate Groupboxes
    Nomainwin
    WindowWidth = 800
    WindowHeight = 600

    UpperLeftX = Int((DisplayWidth-WindowWidth)/2)
    UpperLeftY = Int((DisplayHeight-WindowHeight)/2)

    Radiobutton #main.rbtn1, "Draw Sun", [drawSun], [eraseSun], 20,
530, 100, 24
    Radiobutton #main.rbtn2, "Draw Cloud", [drawCloud], [
eraseCloud], 150, 530, 100, 24
    Groupbox #main.gbx1, "Celestial", 10, 510, 250, 50
    Radiobutton #main.rbtn3, "Draw Yellow Flower", [
```

```
drawYellowFlower], [eraseYellowFlower], 280, 530, 112, 24
    Radiobutton #main.rbtn4, "Draw Pink Flower", [
drawPinkFlower], [erasePinkFlower], 410, 530, 108, 24
    Groupbox #main.gbx2, "Agricultural", 270, 510, 250, 50
    Radiobutton #main.rbtn5, "Draw Ladybug", [drawLadybug], [
eraseLadybug], 540, 530, 100, 24
    Radiobutton #main.rbtn6, "Draw Caterpillar", [
drawCaterpillar], [eraseCaterpillar], 670, 530, 100, 24
    Groupbox #main.gbx3, "Entomological", 530, 510, 250, 50
    Graphicbox #main.gb, 1, 1, 791, 500

    Open "The Radiobuttons" for Window as #main
    #main "Trapclose [endDemo]"
    #main.gb "Down"

'Draw the Blue Sky
    #main.gb "Color Darkblue; Backcolor Darkblue; Place 0 0"
    #main.gb "Boxfilled 790 250"

'Draw the Green Ground
    #main.gb "Color Darkgreen; Backcolor Darkgreen; Place 0 250"
    #main.gb "Boxfilled 790 500"
    Wait

[endDemo]
    Close #main
    End

[drawSun]
    Gosub [drawSunRoutine]
    Gosub [eraseCloudRoutine]
    Wait

[drawCloud]
    Gosub [drawCloudRoutine]
    Gosub [eraseSunRoutine]
    Wait

[drawYellowFlower]
    Gosub [drawYellowFlowerRoutine]
    Gosub [erasePinkFlowerRoutine]
    Wait

[drawPinkFlower]
    Gosub [drawPinkFlowerRoutine]
    Gosub [eraseYellowFlowerRoutine]
```

```
    Wait

[drawLadybug]
    Gosub [drawLadybugRoutine]
    Gosub [eraseCaterpillarRoutine]
    Wait

[drawCaterpillar]
    Gosub [drawCaterpillarRoutine]
    Gosub [eraseLadybugRoutine]
    Wait

[drawSunRoutine]
    #main.gb "Color Yellow; Backcolor Yellow"
    For angle = 10 to 360 Step 10
        #main.gb "Place 200 125; North; Turn ";angle
        #main.gb "Go ";Int(Rnd(1) * 20) + 60
    Next angle
    #main.gb "Place 200 125; Circlefilled 50"
    Return

[eraseSunRoutine]
    #main.gb "Color Darkblue; Backcolor Darkblue"
    #main.gb "Place 40 0; Boxfilled 300 210"
    Return

[drawCloudRoutine]
    #main.gb, "Color White; Backcolor White"
    For i = 1 to 10
        x = Int(Rnd(1)*100) + 600
        y = Int(Rnd(1)*100) + 80
        #main.gb "Place ";x;" ";y
        width = Int(Rnd(1)*10) * 5 + 50
        height = Int(Rnd(1)*10) * 2 + 20
        #main.gb "Ellipsefilled ";width;" ";height
    Next i
    Return

[eraseCloudRoutine]
    #main.gb "Color Darkblue; Backcolor Darkblue"
    #main.gb "Place 550 50; Boxfilled 750 200"
    Return

[drawYellowFlowerRoutine]
    #main.gb, "Color Green; Backcolor Green"
    For x = 295 to 305
```

```
        #main.gb "Line ";x;" 315 ";x;" 375"
    Next x
    #main.gb "Color Yellow; Backcolor Yellow"
    For angle = 0 to 360 Step 60
        #main.gb "Place 300 300; North; Up; Turn ";angle
        #main.gb "Go 20; Down; Circlefilled 15"
    Next angle
    #main.gb "Color Pink; Backcolor Pink"
    #main.gb "Place 300 300; Circlefilled 10"
    Return

[eraseYellowFlowerRoutine]
    #main.gb "Color Darkgreen; Backcolor Darkgreen"
    #main.gb "Place 265 265; Boxfilled 335 380"
    Return

[drawPinkFlowerRoutine]
    #main.gb "Color Green"
    For x = 495 to 505
        #main.gb, "Line ";x;" 315 ";x;" 375"
    Next x
    #main.gb "Color Pink; Backcolor Pink"
    For angle = 0 to 360 Step 60
        #main.gb "Place 500 300; North; Up; Turn ";angle
        #main.gb "Go 20; Down; Circlefilled 15"
    Next angle
    #main.gb "Color Yellow; Backcolor Yellow"
    #main.gb "Place 500 300; Circlefilled 10"
    Return

[erasePinkFlowerRoutine]
    #main.gb "Color Darkgreen; Backcolor Darkgreen"
    #main.gb "Place 465 265; Boxfilled 535 380"
    Return

[drawLadybugRoutine]
    #main.gb "Color Red; Backcolor Red"
    #main.gb "Place 100 400"
    #main.gb "Ellipsefilled 80 50"
    #main.gb "Color Black; Backcolor Black"
    #main.gb "Place 80 400; Circlefilled 5"
    #main.gb "Place 90 390; Circlefilled 5"
    #main.gb "Place 90 410; Circlefilled 5"
    #main.gb "Place 110 385; Circlefilled 5"
    #main.gb "Place 105 400; Circlefilled 5"
    #main.gb "Place 110 415; Circlefilled 5"
```

```
    #main.gb "Place 125 392; Circlefilled 5"
    #main.gb "Place 125 408; Circlefilled 5"
    #main.gb "Line 136 396 150 380; Circlefilled 3"
    #main.gb "Line 136 404 150 420; Circlefilled 3"
    Return

[eraseLadybugRoutine]
    #main.gb "Color Darkgreen; Backcolor Darkgreen"
    #main.gb "Place 50 375; Boxfilled 155 425"
    Return

[drawCaterpillarRoutine]
    #main.gb, "Color Darkcyan; Backcolor Darkcyan"
    x = 620
    For i = 1 to 4
        y = 400 - 10 * (i/2 = Int(i/2))
        #main.gb "Place ";x;" ";y
        #main.gb "Ellipsefilled 50 20"
        x = x + 30
    Next i
    #main.gb "Color Black; Backcolor Black"
    #main.gb "Place 616 400; Circlefilled 4"
    #main.gb "Place 624 400; Circlefilled 4"
    Return

[eraseCaterpillarRoutine]
    #main.gb "Color Darkgreen; Backcolor Darkgreen"
    #main.gb "Place 590 375; Boxfilled 750 425"
    Return
```

Now the visual display matches the code.