Classification	☐ tDS ☐ tGW ☐ PETL/tET/tPET ☐ DS/PDS/PPDS ☑ TouchPAD ☐ I/O Card ☐ VXC Card ☐ VxComm ☐ Other				
Author	Jack Lin	Date	2020-09-22	NO.	FAQ042

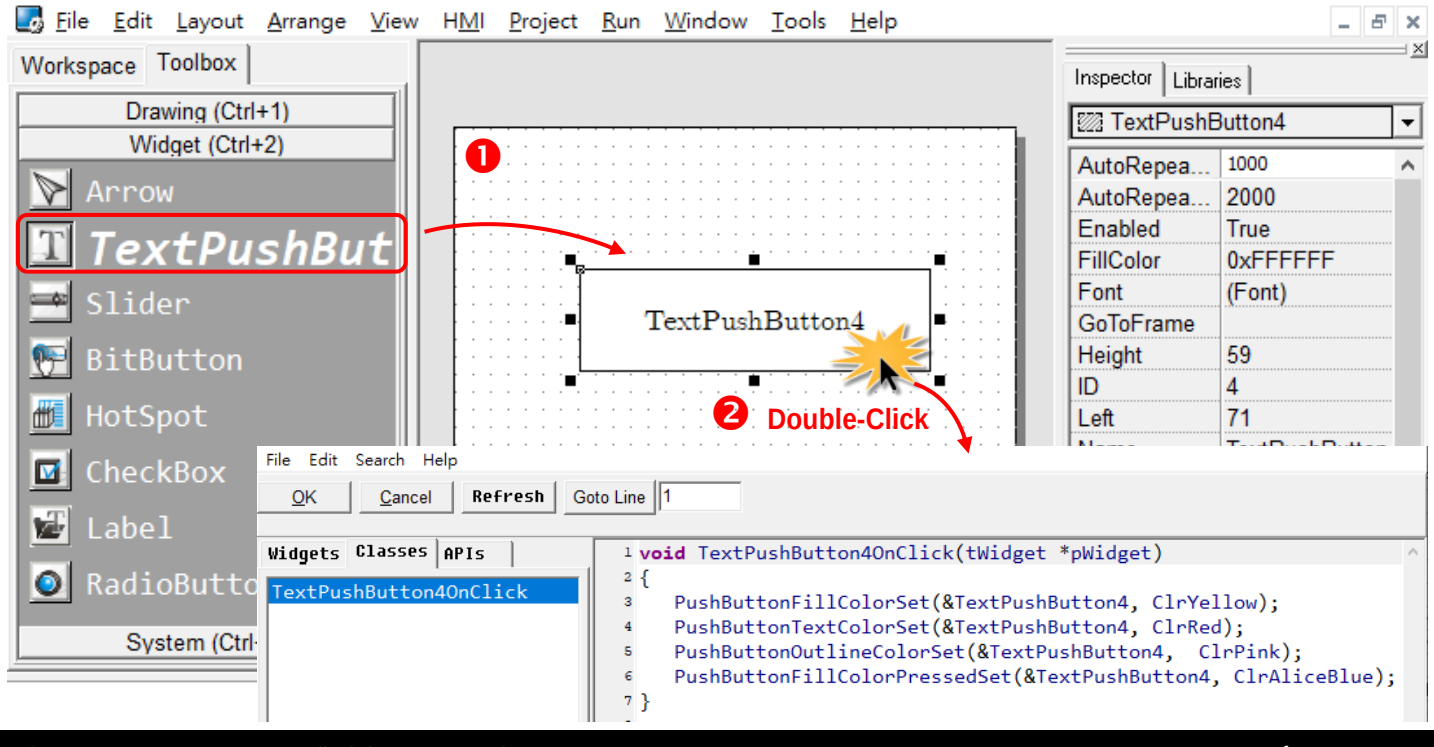
Q: How to change widget color in the program in C?

A: The following shows the function to change the color of each widget. (The definition of the color code used in this example is attached at the end of this FAQ)

TextPushButton

PushButtonFillColorSet (tTextButton * pWidget, unsigned long color)
PushButtonTextColorSet (tTextButton * pWidget, unsigned long color)
PushButtonOutlineColorSet (tTextButton * pWidget, unsigned long color)
PushButtonFillColorPressedSet (tTextButton * pWidget, unsigned long color)

Step 1: Click the **TextPushButton** icon in the "**Toolbox**" panel and move your mouse to the frame design area. Click and drag a suitable sized **TextPushButton**.
Step 2: Double-click the **TextPushButton** component to implement its **OnClick** event handler in the displayed programming window. Then click the **OK** button to save the file and leave.



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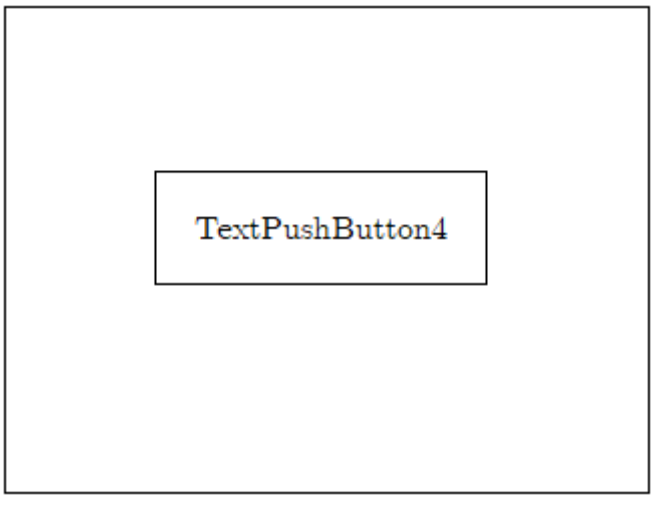
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In order to make it clearer, we copy the above codes below.

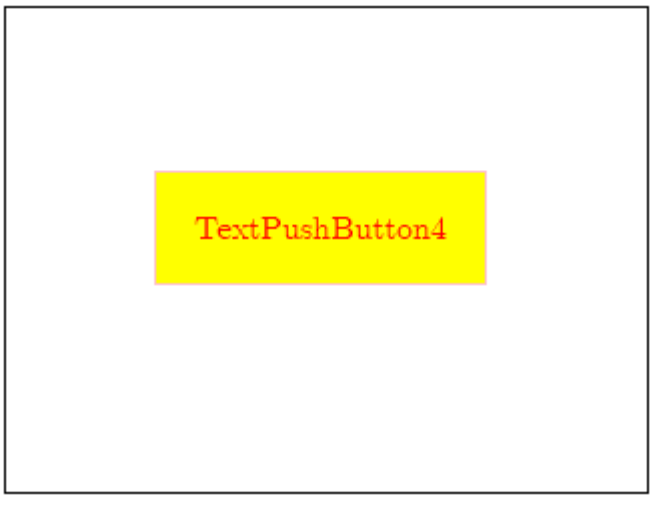
```
void TextPushButton4OnClick(tWidget *pWidget)
{
    PushButtonFillColorSet(&TextPushButton4, ClrYellow);
    PushButtonTextColorSet(&TextPushButton4, ClrRed);
    PushButtonOutlineColorSet(&TextPushButton4, ClrPink);
    PushButtonFillColorPressedSet(&TextPushButton4, ClrAliceBlue);
}
```

The effect of the **OnClick** event handler:

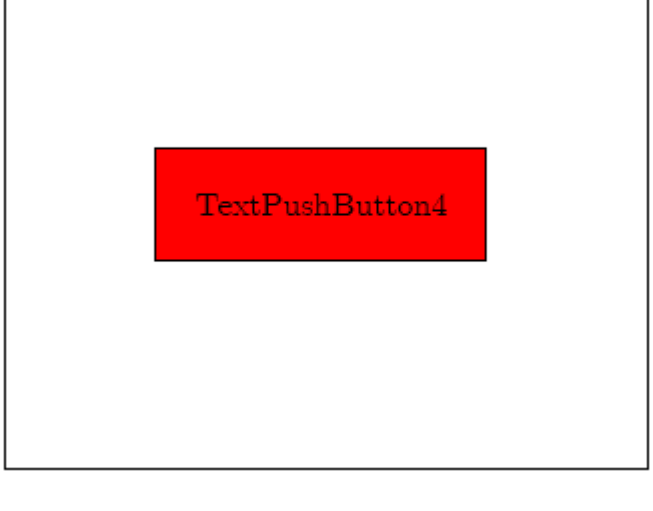
Before click:



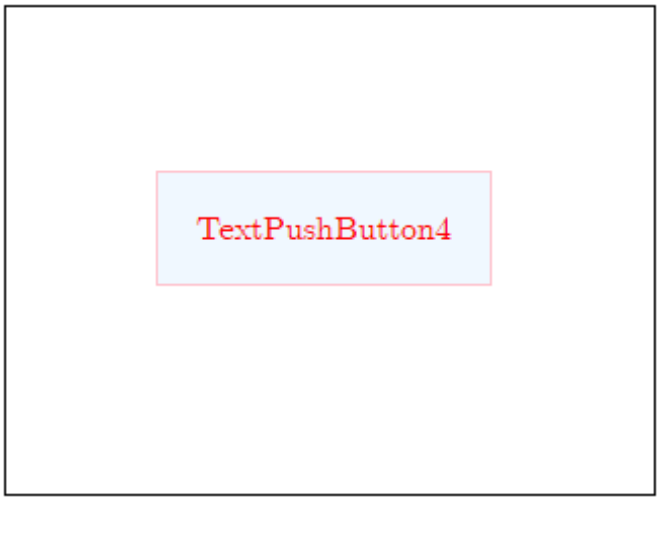
After click:



Pressing the button before click:



Pressing the button after click:



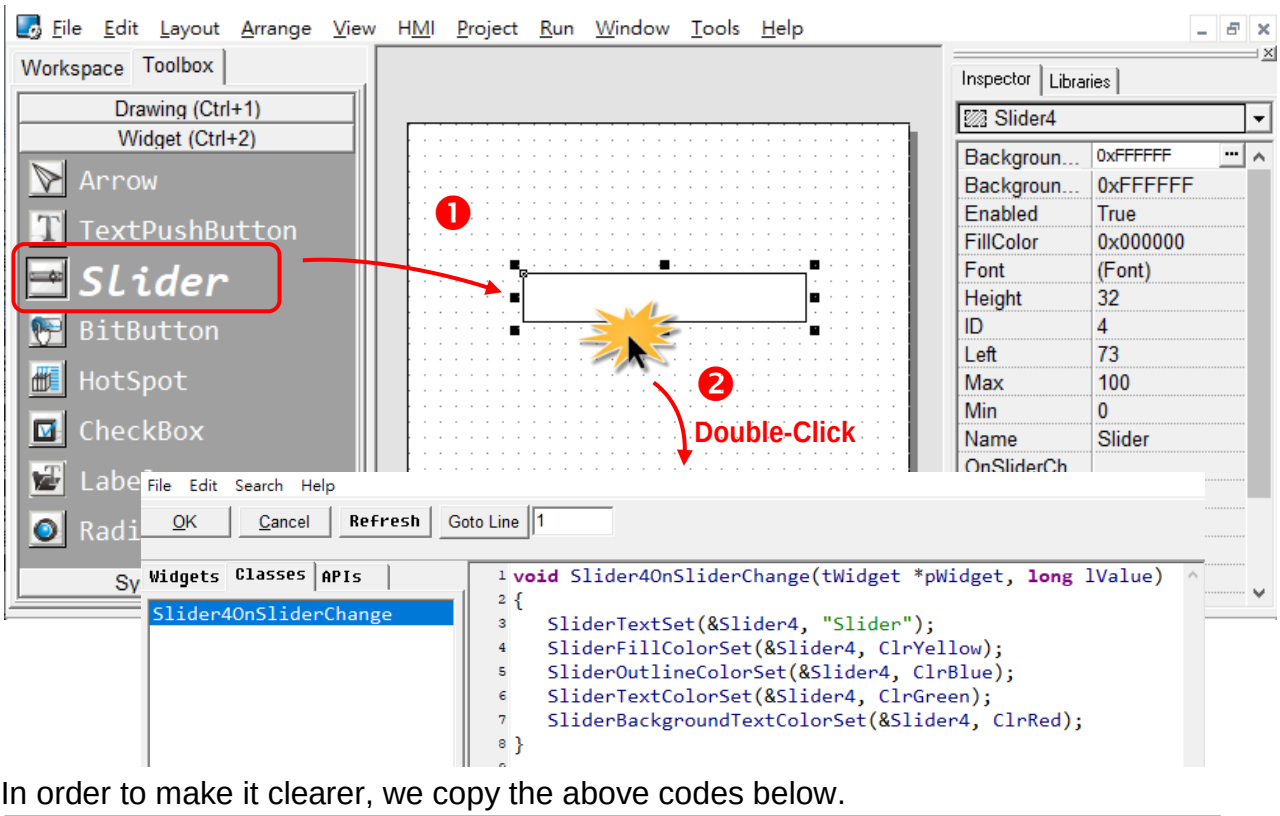
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Slider

SliderFillColorSet (tSlider * pWidget, unsigned long color)
SliderOutlineColorSet (tSlider * pWidget, unsigned long color)
SliderTextColorSet (tSlider * pWidget, unsigned long color)
SliderBackgroundTextColorSet (tSlider * pWidget, unsigned long color)

Step 1: Click the **Slider** icon in the "**Toolbox**" panel and move your mouse to the frame design area. Click and drag a suitable sized **Slider**.
Step 2: Double-click the **Slider** component to implement its **OnClick** event handler in the displayed programming window. Then click the **OK** button to save the file and leave.



In order to make it clearer, we copy the above codes below.

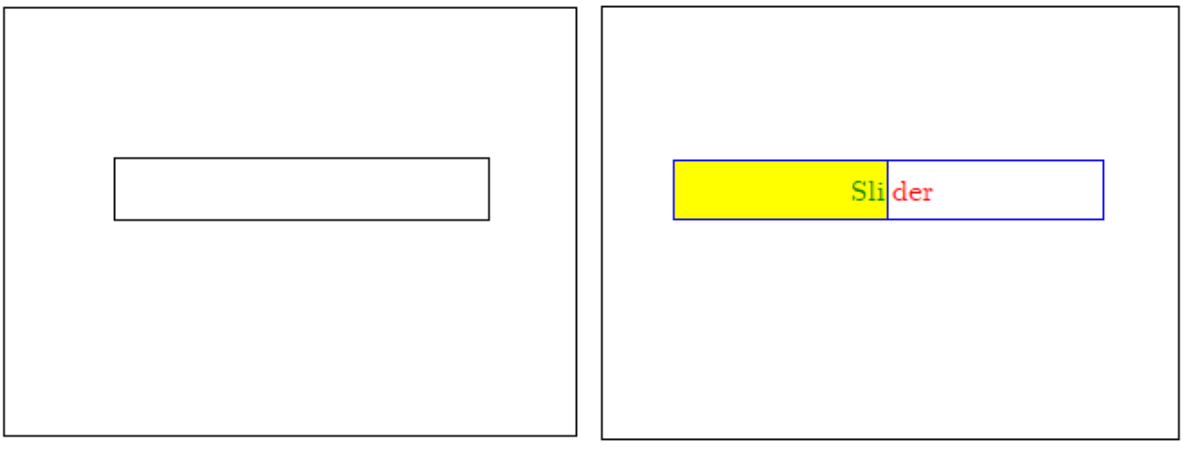
```
void Slider4OnSliderChange(tWidget *pWidget, long lValue)
{
    SliderTextSet(&Slider4, "Slider");
    SliderFillColorSet(&Slider4, ClrYellow);
    SliderOutlineColorSet(&Slider4, ClrBlue);
    SliderTextColorSet(&Slider4, ClrGreen);
    SliderBackgroundTextColorSet(&Slider4, ClrRed);
}
```

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The effect of the **OnClick** event handler:

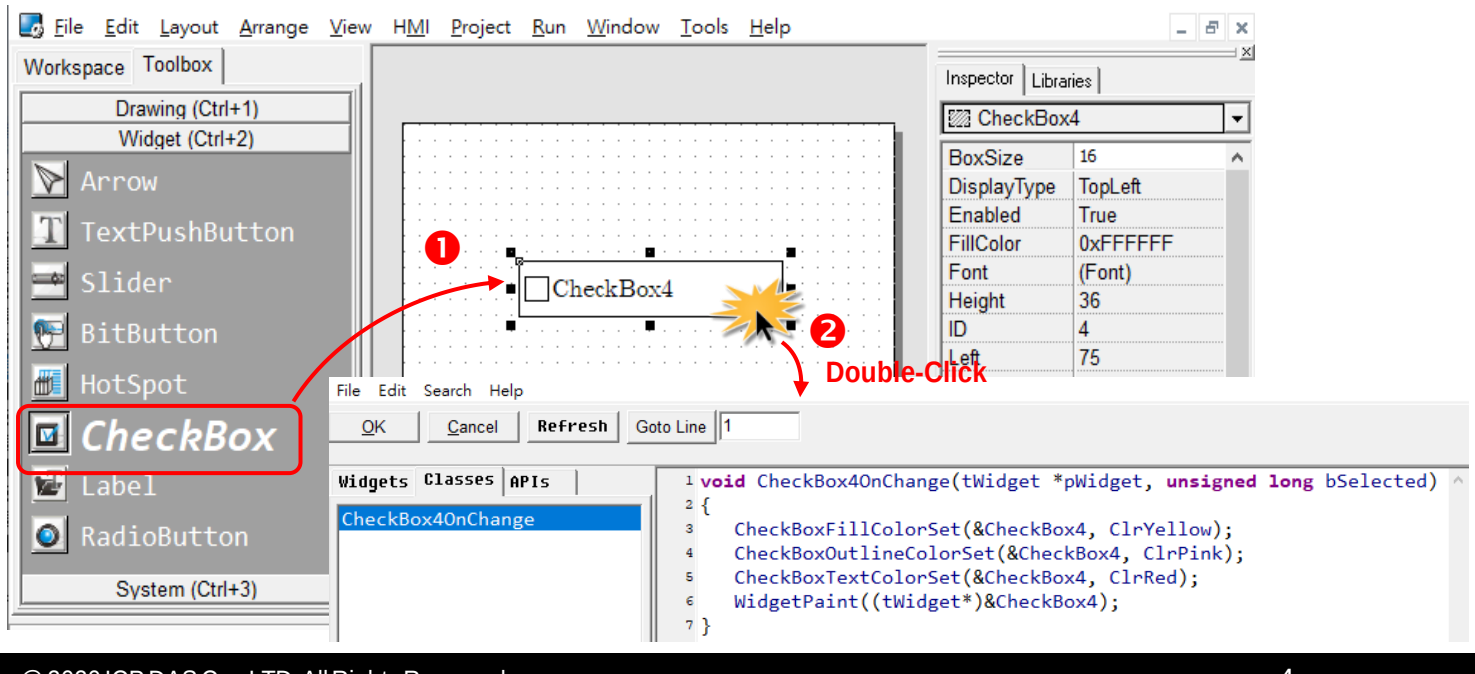
Before click: After click:



CheckBox

CheckBoxFillColorSet (tCheckBox * pWidget, unsigned long color)
CheckBoxOutlineColorSet (tCheckBox * pWidget, unsigned long color)
CheckBoxTextColorSet (tCheckBox * pWidget, unsigned long color)

Step 1: Click the **CheckBox** icon in the "**Toolbox**" panel and move your mouse to the frame design area. Click and drag a suitable sized **CheckBox**.
Step 2: Double-click the **CheckBox** component to implement its **OnClick** event handler in the displayed programming window. Then click the **OK** button to save the file and leave.



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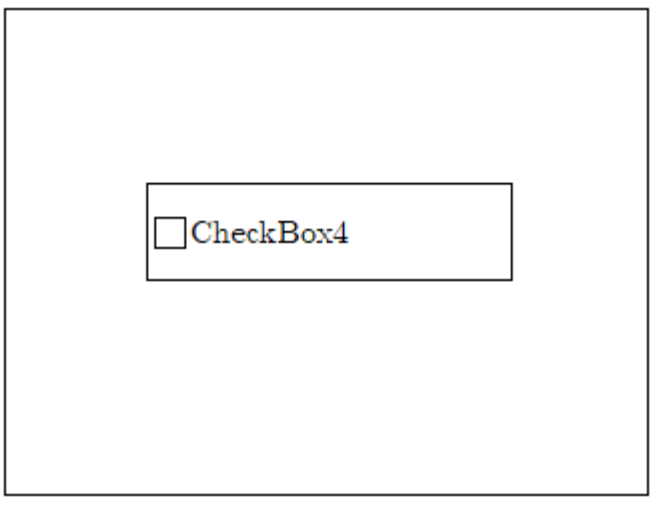
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In order to make it clearer, we copy the above codes below.

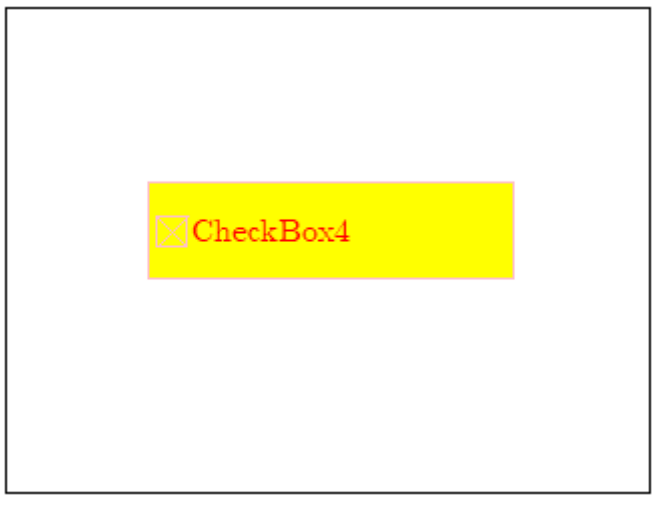
```
void CheckBox4OnChange(tWidget *pWidget, unsigned long bSelected)
{
    CheckBoxFillColorSet(&CheckBox4, ClrYellow);
    CheckBoxOutlineColorSet(&CheckBox4, ClrPink);
    CheckBoxTextColorSet(&CheckBox4, ClrRed);
    WidgetPaint((tWidget*)&CheckBox4);
}
```

The effect of the **OnClick** event handler:

Before click:



After click:



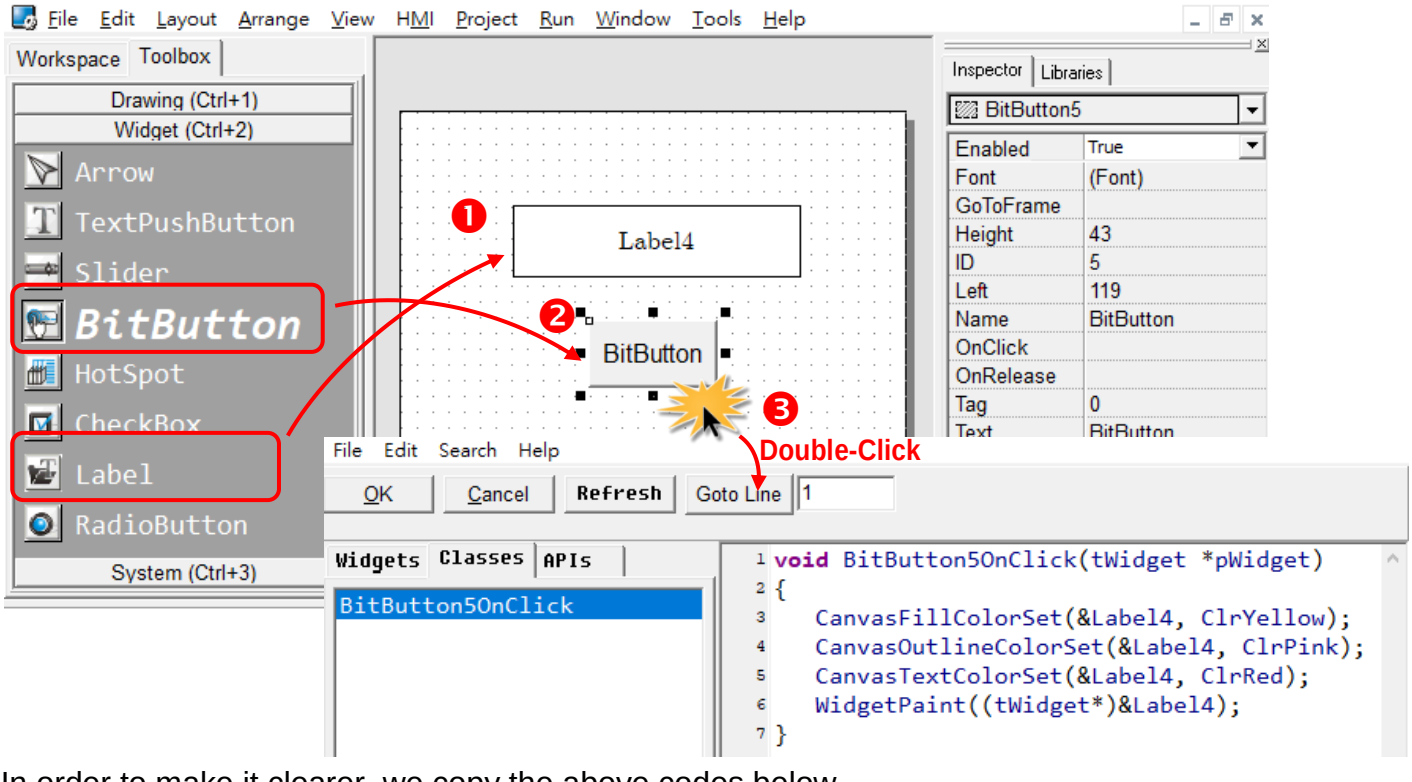
Label

CanvasFillColorSet (tLabel * pWidget, unsigned long color)
CanvasOutlineColorSet (tLabel * pWidget, unsigned long color)
CanvasTextColorSet (tLabel * pWidget, unsigned long color)

Step 1: Click the **Label** icon in the "**Toolbox**" panel and move your mouse to the frame design area. Click and drag a suitable sized **Label**.
Step 2: Repeat the same procedure as that of the **Label** component for a **BitButton** component.
Step 3: Double-click the **BitButton** component to implement its **OnClick** event handler in the displayed programming window. Then click the **OK** button to save the file and leave.

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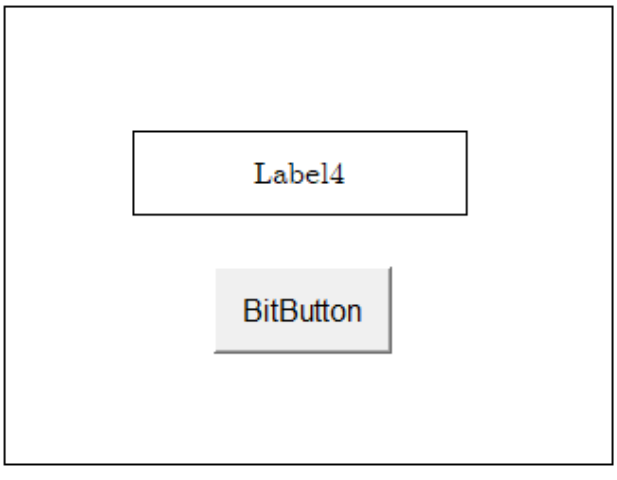


In order to make it clearer, we copy the above codes below.

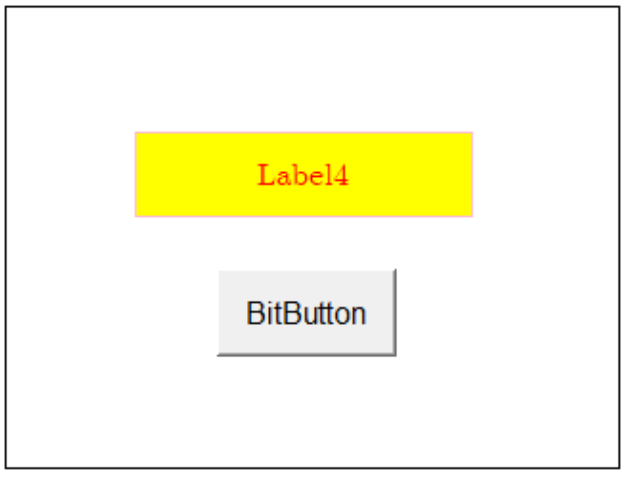
```
void BitButton5OnClick(tWidget *pWidget)
{
    CanvasFillColorSet(&Label4, ClrYellow);
    CanvasOutlineColorSet(&Label4, ClrPink);
    CanvasTextColorSet(&Label4, ClrRed);
    WidgetPaint((tWidget*)&Label4);
}
```

The effect of the **OnClick** event handler:

Before click:



After click:



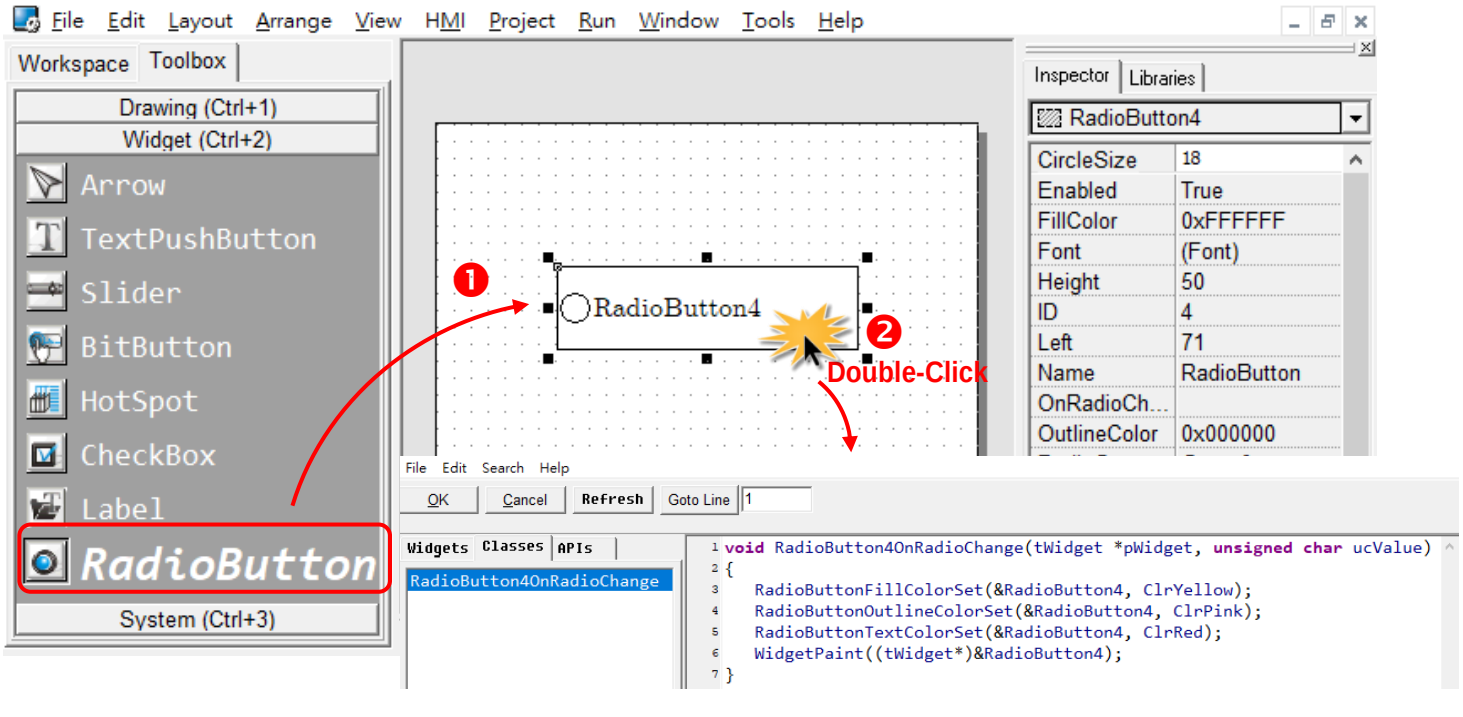
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RadioButton

RadioButtonFillColorSet (tRadioButton * pWidget, unsigned long color)
RadioButtonOutlineColorSet (tRadioButton * pWidget, unsigned long color)
RadioButtonTextColorSet (tRadioButton * pWidget, unsigned long color)

Step 1: Click the **RadioButton** icon in the "**Toolbox**" panel and move your mouse to the frame design area. Click and drag a suitable sized **RadioButton**.
Step 2: Double-click the **RadioButton** component to implement its **OnClick** event handler in the displayed programming window. Then click the **OK** button to save the file and leave.



In order to make it clearer, we copy the above codes below.

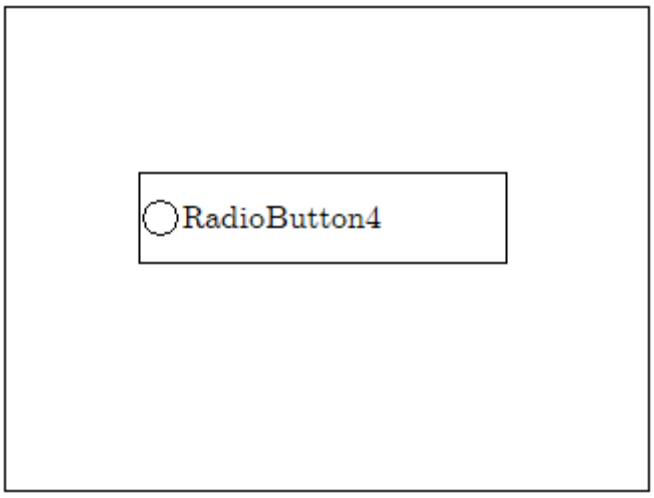
```
void RadioButton4OnRadioChange(tWidget *pWidget, unsigned char ucValue)
{
    RadioButtonFillColorSet(&RadioButton4, ClrYellow);
    RadioButtonOutlineColorSet(&RadioButton4, ClrPink);
    RadioButtonTextColorSet(&RadioButton4, ClrRed);
    WidgetPaint((tWidget*)&RadioButton4);
}
```

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The effect of the **OnClick** event handler:

Before click:



After click:



The color code defined by HMIWorks:

#define ClrAliceBlue	0x00F0F8FF
#define ClrAntiqueWhite	0x00FAEBD7
#define ClrAqua	0x0000FFFF
#define ClrAquamarine	0x007FFFD4
#define ClrAzure	0x00F0FFFF
#define ClrBeige	0x00F5F5DC
#define ClrBisque	0x00FFE4C4
#define ClrBlack	0x00000000
#define ClrBlanchedAlmond	0x00FFEBCD
#define ClrBlue	0x000000FF
#define ClrBlueViolet	0x008A2BE2
#define ClrBrown	0x00A52A2A
#define ClrBurlyWood	0x00DEB887
#define ClrCadetBlue	0x005F9EA0
#define ClrChartreuse	0x007FFF00
#define ClrChocolate	0x00D2691E
#define ClrCoral	0x00FF7F50
#define ClrCornflowerBlue	0x006495ED
#define ClrCornsilk	0x00FFF8DC
#define ClrCrimson	0x00DC143C
#define ClrCyan	0x0000FFFF
define ClrDarkBlue	0x0000008B

#define ClrDarkCyan	0x00008B8B
#define ClrDarkGoldenrod	0x00B8860B
#define ClrDarkGray	0x00A9A9A9
#define ClrDarkGreen	0x00006400
#define ClrDarkKhaki	0x00BDB76B
#define ClrDarkMagenta	0x008B008B
#define ClrDarkOliveGreen	0x00556B2F
#define ClrDarkOrange	0x00FF8C00
#define ClrDarkOrchid	0x009932CC
#define ClrDarkRed	0x008B0000
#define ClrDarkSalmon	0x00E9967A
#define ClrDarkSeaGreen	0x008FBC8F
#define ClrDarkSlateBlue	0x00483D8B
#define ClrDarkSlateGray	0x002F4F4F
#define ClrDarkTurquoise	0x0000CED1
#define ClrDarkViolet	0x009400D3
#define ClrDeepPink	0x00FF1493
#define ClrDeepSkyBlue	0x0000BFFF
#define ClrDimGray	0x00696969
#define ClrDodgerBlue	0x001E90FF
#define ClrFireBrick	0x00B22222
#define ClrFloralWhite	0x00FFFAF0

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#define ClrForestGreen	0x00228B22
#define ClrFuchsia	0x00FF00FF
#define ClrGainsboro	0x00DCDCDC
#define ClrGhostWhite	0x00F8F8FF
#define ClrGold	0x00FFD700
#define ClrGoldenrod	0x00DAA520
#define ClrGray	0x00808080
#define ClrGreen	0x00008000
#define ClrGreenYellow	0x00ADFF2F
#define ClrHoneydew	0x00F0FFF0
#define ClrHotPink	0x00FF69B4
#define ClrIndianRed	0x00CD5C5C
#define ClrIndigo	0x004B0082
#define ClrIvory	0x00FFFFF0
#define ClrKhaki	0x00F0E68C
#define ClrLavender	0x00E6E6FA
#define ClrLavenderBlush	0x00FFF0F5
#define ClrLawnGreen	0x007CFC00
#define ClrLemonChiffon	0x00FFFACD
#define ClrLightBlue	0x00ADD8E6
#define ClrLightCoral	0x00F08080
#define ClrLightCyan	0x00E0FFFF
#define ClrLightGoldenrodYellow	0x00FAFAD2
#define ClrLightGreen	0x0090EE90
#define ClrLightGrey	0x00D3D3D3
#define ClrLightPink	0x00FFB6C1
#define ClrLightSalmon	0x00FFA07A
#define ClrLightSeaGreen	0x0020B2AA
#define ClrLightSkyBlue	0x0087CEFA
#define ClrLightSlateGray	0x00778899
#define ClrLightSteelBlue	0x00B0C4DE
#define ClrLightYellow	0x00FFFFE0
#define ClrLime	0x0000FF00
#define ClrLimeGreen	0x0032CD32
#define ClrLinen	0x00FAF0E6
#define ClrMagenta	0x00FF00FF
#define ClrMaroon	0x00800000

#define ClrMediumAquamarine	0x0066CDAA
#define ClrMediumBlue	0x000000CD
#define ClrMediumOrchid	0x00BA55D3
#define ClrMediumPurple	0x009370DB
#define ClrMediumSeaGreen	0x003CB371
#define ClrMediumSlateBlue	0x007B68EE
#define ClrMediumSpringGreen	0x0000FA9A
#define ClrMediumTurquoise	0x0048D1CC
#define ClrMediumVioletRed	0x00C71585
#define ClrMidnightBlue	0x00191970
#define ClrMintCream	0x00F5FFFA
#define ClrMistyRose	0x00FFE4E1
#define ClrMoccasin	0x00FFE4B5
#define ClrNavajoWhite	0x00FFDEAD
#define ClrNavy	0x00000080
#define ClrOldLace	0x00FDF5E6
#define ClrOlive	0x00808000
#define ClrOliveDrab	0x006B8E23
#define ClrOrange	0x00FFA500
#define ClrOrangeRed	0x00FF4500
#define ClrOrchid	0x00DA70D6
#define ClrPaleGoldenrod	0x00EEE8AA
#define ClrPaleGreen	0x0098FB98
#define ClrPaleTurquoise	0x00AFEEEE
#define ClrPaleVioletRed	0x00DB7093
#define ClrPapayaWhip	0x00FFEFD5
#define ClrPeachPuff	0x00FFDAB9
#define ClrPeru	0x00CD853F
#define ClrPink	0x00FFC0CB
#define ClrPlum	0x00DDA0DD
#define ClrPowderBlue	0x00B0E0E6
#define ClrPurple	0x00800080
#define ClrRed	0x00FF0000
#define ClrRosyBrown	0x00BC8F8F
#define ClrRoyalBlue	0x004169E1
#define ClrSaddleBrown	0x008B4513
#define ClrSalmon	0x00FA8072

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#define ClrSandyBrown	0x00F4A460
#define ClrSeaGreen	0x002E8B57
#define ClrSeashell	0x00FFF5EE
#define ClrSienna	0x00A0522D
#define ClrSilver	0x00C0C0C0
#define ClrSkyBlue	0x0087CEEB
#define ClrSlateBlue	0x006A5ACD
#define ClrSlateGray	0x00708090
#define ClrSnow	0x00FFFAFA
#define ClrSpringGreen	0x0000FF7F
#define ClrSteelBlue	0x004682B4
#define ClrTan	0x00D2B48C
#define ClrTeal	0x00008080
#define ClrThistle	0x00D8BFD8
#define ClrTomato	0x00FF6347
#define ClrTurquoise	0x0040E0D0
#define ClrViolet	0x00EE82EE
#define ClrWheat	0x00F5DEB3
#define ClrWhite	0x00FFFFFF
#define ClrWhiteSmoke	0x00F5F5F5
#define ClrYellow	0x00FFFF00
#define ClrYellowGreen	0x009ACD32

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