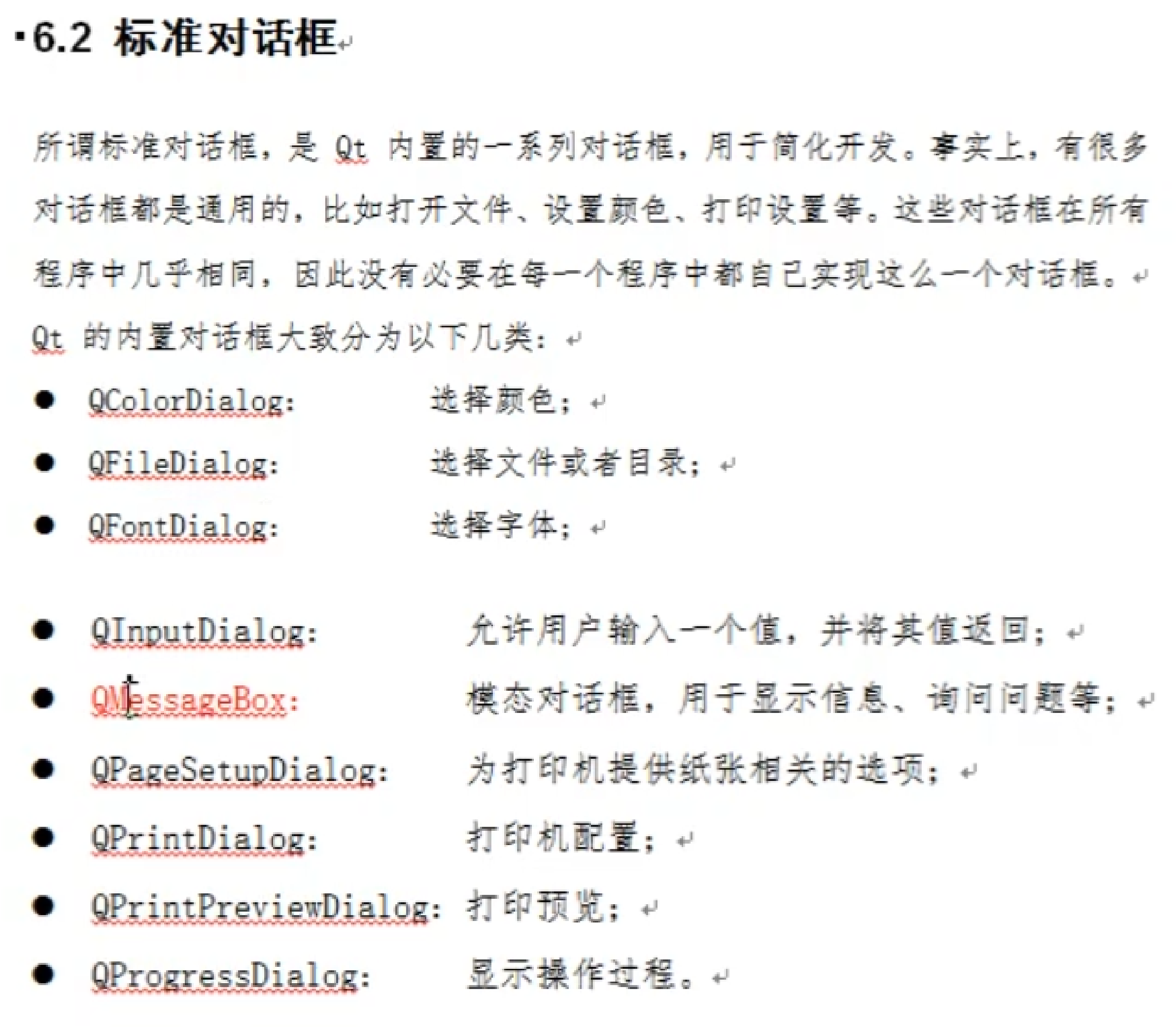
QDialog

标准对话框

基本概念：



·6.2 标准对话框

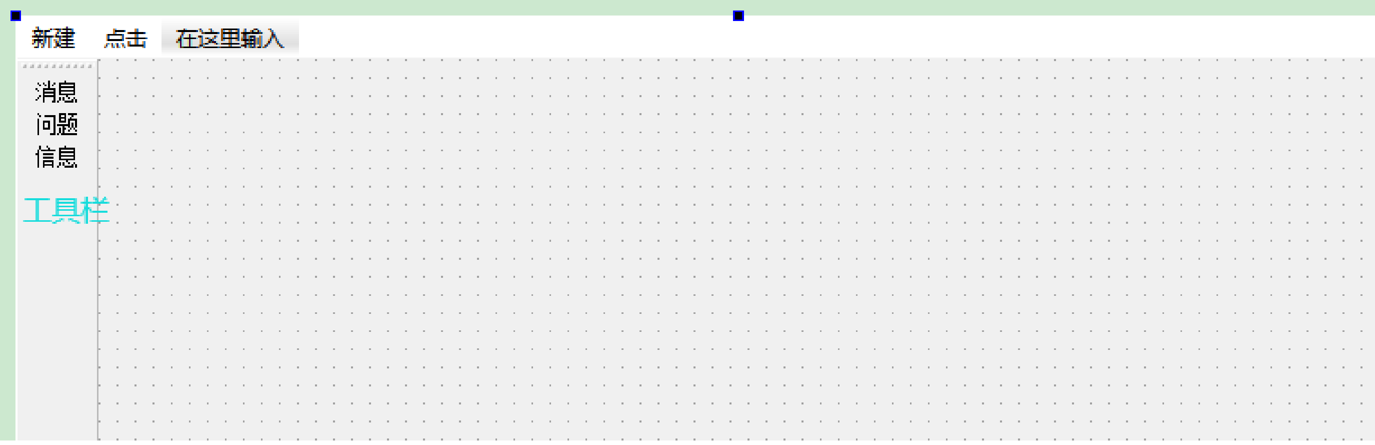
所谓标准对话框，是 Qt 内置的一系列对话框，用于简化开发。事实上，有很多对话框都是通用的，比如打开文件、设置颜色、打印设置等。这些对话框在所有程序中几乎相同，因此没有必要在每一个程序中都自己实现这么一个对话框。

Qt 的内置对话框大致分为以下几类：

- QColorDialog： 选择颜色；
- QFileDialog： 选择文件或者目录；
- QFontDialog： 选择字体；
- QInputDialog： 允许用户输入一个值，并将其值返回；
- QMessageBox： 模态对话框，用于显示信息、询问问题等；
- QPageSetupDialog： 为打印机提供纸张相关的选项；
- QPrintDialog： 打印机配置；
- QPrintPreviewDialog： 打印预览；
- QProgressDialog： 显示操作过程。

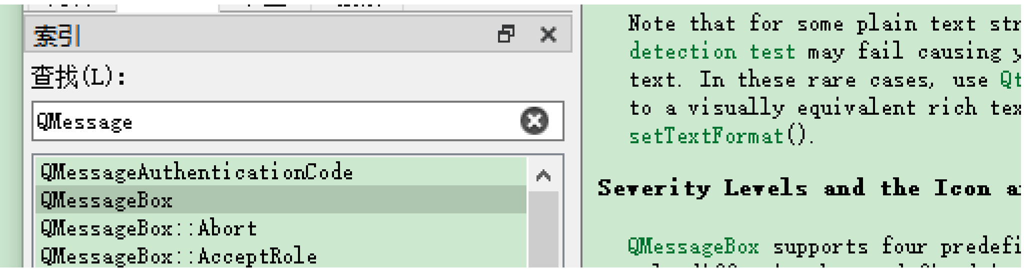
```
#include "mainwindow.h"
#include "ui_mainwindow.h"
#include<QDialog>
#include<QDebug>
#include<QMessageBox>
MainWindow::MainWindow(QWidget *parent)
    : QMainWindow(parent)
    , ui(new Ui::MainWindow)
{
    ui->setupUi(this);
    connect(ui->action1,&QAction::triggered,[=](){
    QMessageBox::critical( this , "critical" , "消息");//默认为模态对话框

    });
    connect(ui->action2,&QAction::triggered,[=](){
```

```
    QMessageBox::information( this , "info" , "信息");//默认为模态对话框
    });
    connect(ui->action3,&QAction::triggered,[=](){
    QMessageBox::question( this , "ques" , "提问");//默认为模态对话框
    });
}

MainWindow::~MainWindow()
{
    delete ui;
}
```



1----消息对话框

查询帮助文档



查找(L):

QMessage

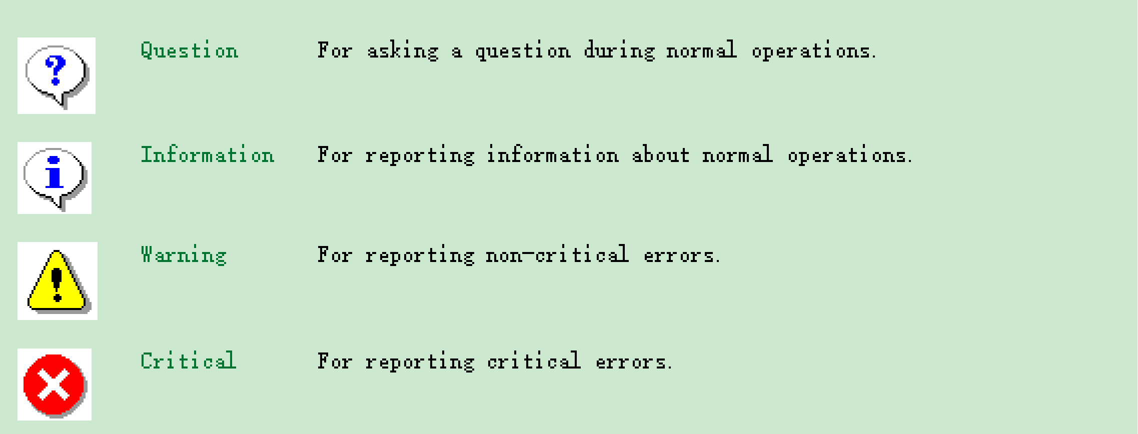
QMessageAuthenticationCode
QMessageBox
QMessageBox::Abort
QMessageBox::AcceptRole

Note that for some plain text str
detection test may fail causing y
text. In these rare cases, use Qt
to a visually equivalent rich tex
setTextFormat().

Severity Levels and the Icon a

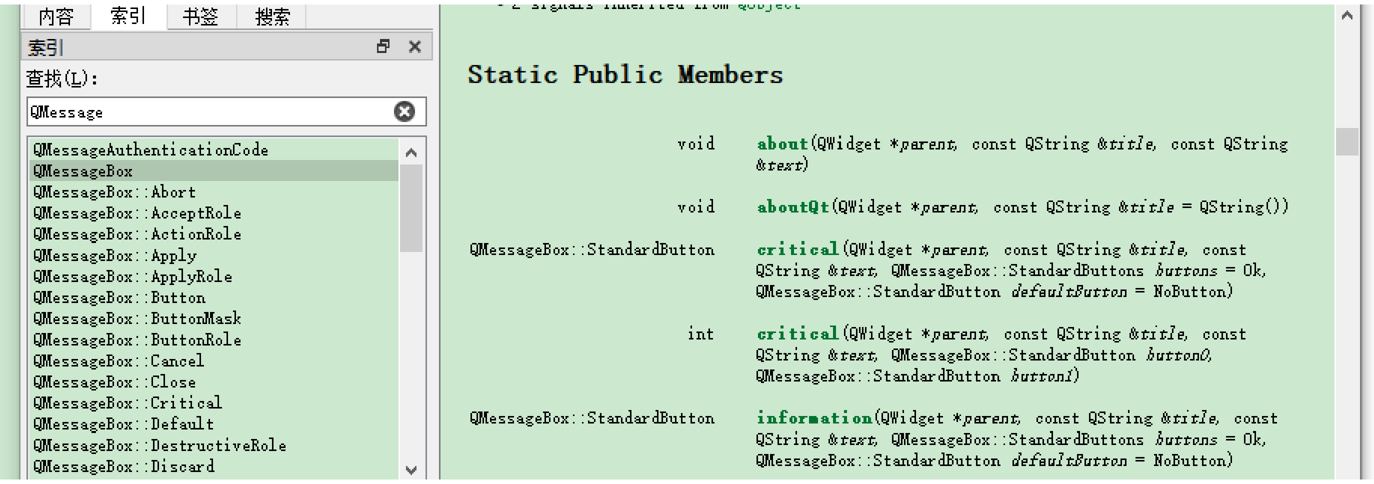
QMessageBox supports four predefi

下拉寻找提供的消息类型



?	Question	For asking a question during normal operations.
i	Information	For reporting information about normal operations.
!	Warning	For reporting non-critical errors.
×	Critical	For reporting critical errors.

查看对外接口

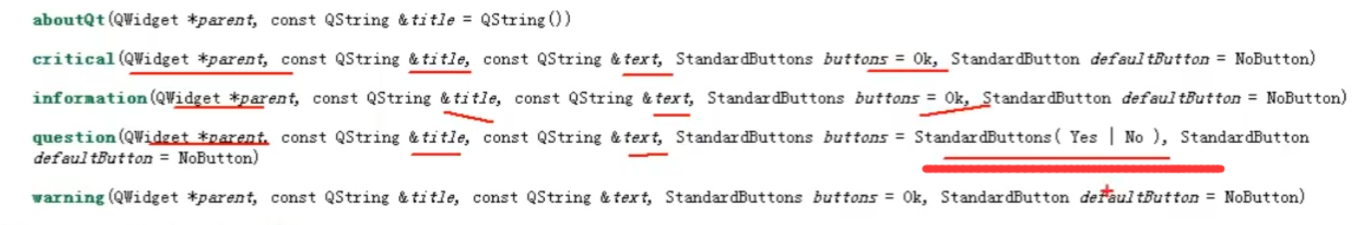


QMessage

QMessageAuthenticationCode
QMessageBox
QMessageBox::Abort
QMessageBox::AcceptRole
QMessageBox::ActionRole
QMessageBox::Apply
QMessageBox::ApplyRole
QMessageBox::Button
QMessageBox::ButtonMask
QMessageBox::ButtonRole
QMessageBox::Cancel
QMessageBox::Close
QMessageBox::Critical
QMessageBox::Default
QMessageBox::DestructiveRole
QMessageBox::Discard

Static Public Members

```
                       void  about(QWidget *parent, const QString &title, const QString
                             &text)
                       void  aboutQt(QWidget *parent, const QString &title = QString())
QMessageBox::StandardButton  critical(QWidget *parent, const QString &title, const
                             QString &text, QMessageBox::StandardButtons buttons = Ok,
                             QMessageBox::StandardButton defaultButton = NoButton)
                        int  critical(QWidget *parent, const QString &title, const
                             QString &text, QMessageBox::StandardButton button0,
                             QMessageBox::StandardButton button1)
QMessageBox::StandardButton  information(QWidget *parent, const QString &title, const
                             QString &text, QMessageBox::StandardButtons buttons = Ok,
                             QMessageBox::StandardButton defaultButton = NoButton)
```



```
aboutQt(QWidget *parent, const QString &title = QString())

critical(QWidget *parent, const QString &title, const QString &text, StandardButtons buttons = Ok, StandardButton defaultButton = NoButton)

information(QWidget *parent, const QString &title, const QString &text, StandardButtons buttons = Ok, StandardButton defaultButton = NoButton)

question(QWidget *parent, const QString &title, const QString &text, StandardButtons buttons = StandardButtons( Yes | No ), StandardButton
defaultButton = NoButton)

warning(QWidget *parent, const QString &title, const QString &text, StandardButtons buttons = Ok, StandardButton defaultButton = NoButton)
```

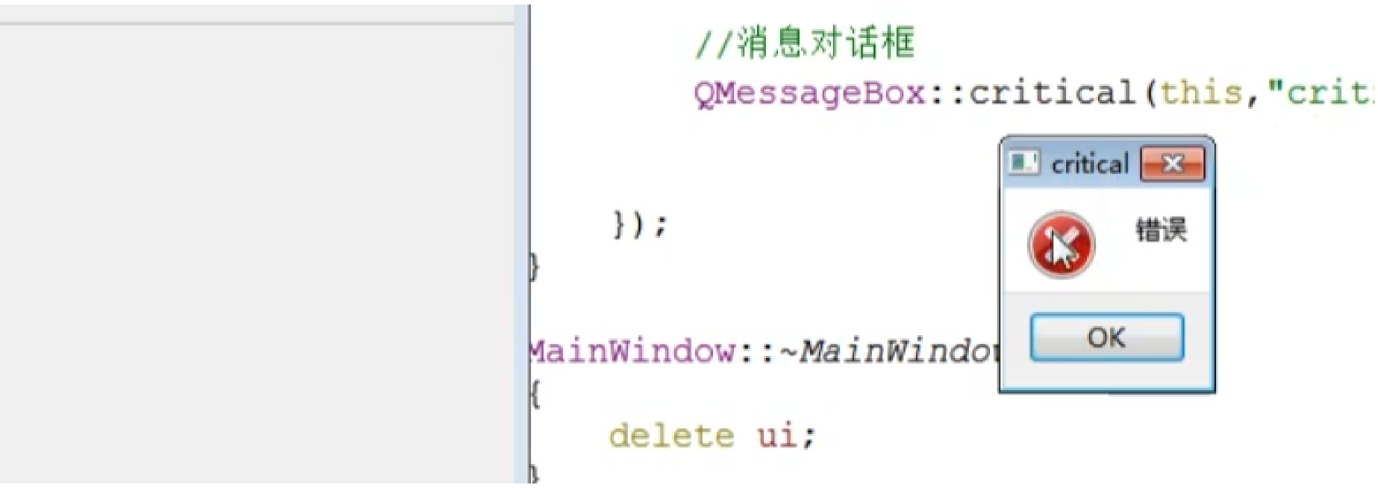
首先创建一个按钮

使其点击之后弹出一个对话框

```
Connect(ui->actionNew,&QAction::t
riggered,[=](){/*这里包含对话框的内容*/});
```

消息对话框（critical)

```
connect(ui->action1,&QAction::triggered,[=](){
   QMessageBox::critical( this , "critical" , "消息");//默认为模态对话框

   });
```

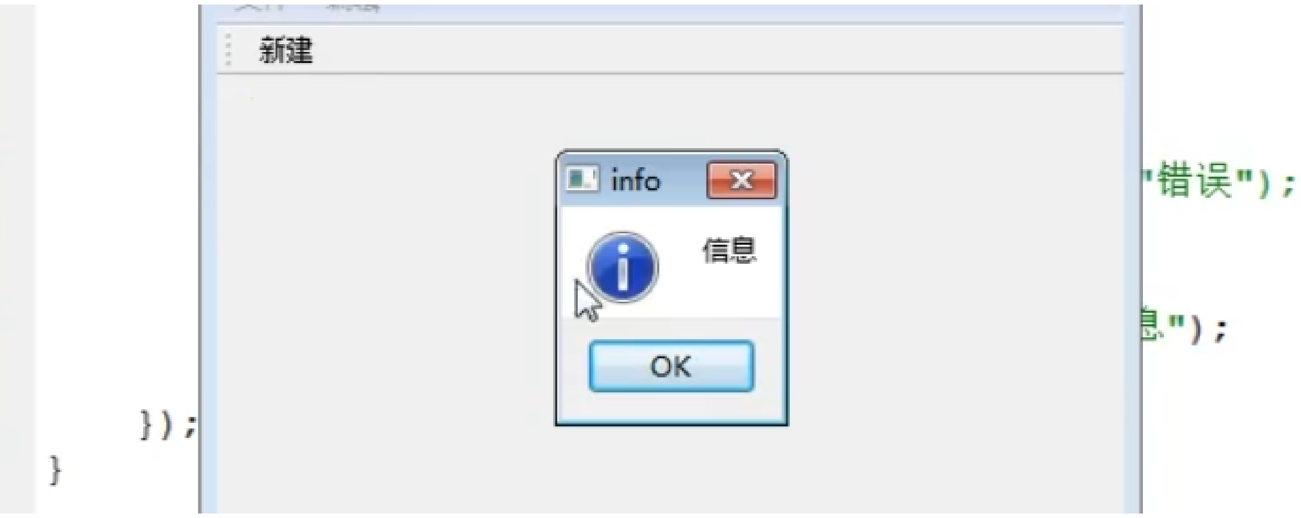


```
        //消息对话框
        QMessageBox::critical(this,"crit

    });
}

MainWindow::~MainWindo
{
    delete ui;
}
```

点击后出现如上对话框

信息对话框（information)

```
connect(ui->action2,&QAction::triggered,[=](){
    QMessageBox::information( this , "info" , "信息");//默认为模态对话框
    });
```



新建

info

信息

OK

"错误");

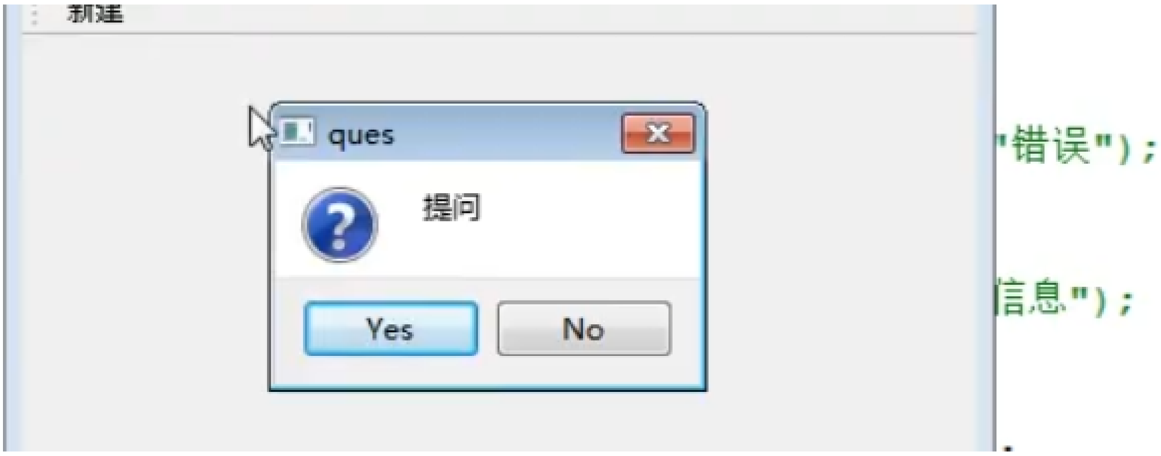
息");

});
}

问题对话框（question)

no_1

```
QMessageBox::question( this , "ques" , "提问");//默认为模态对话框
```



新建

ques

提问

Yes No

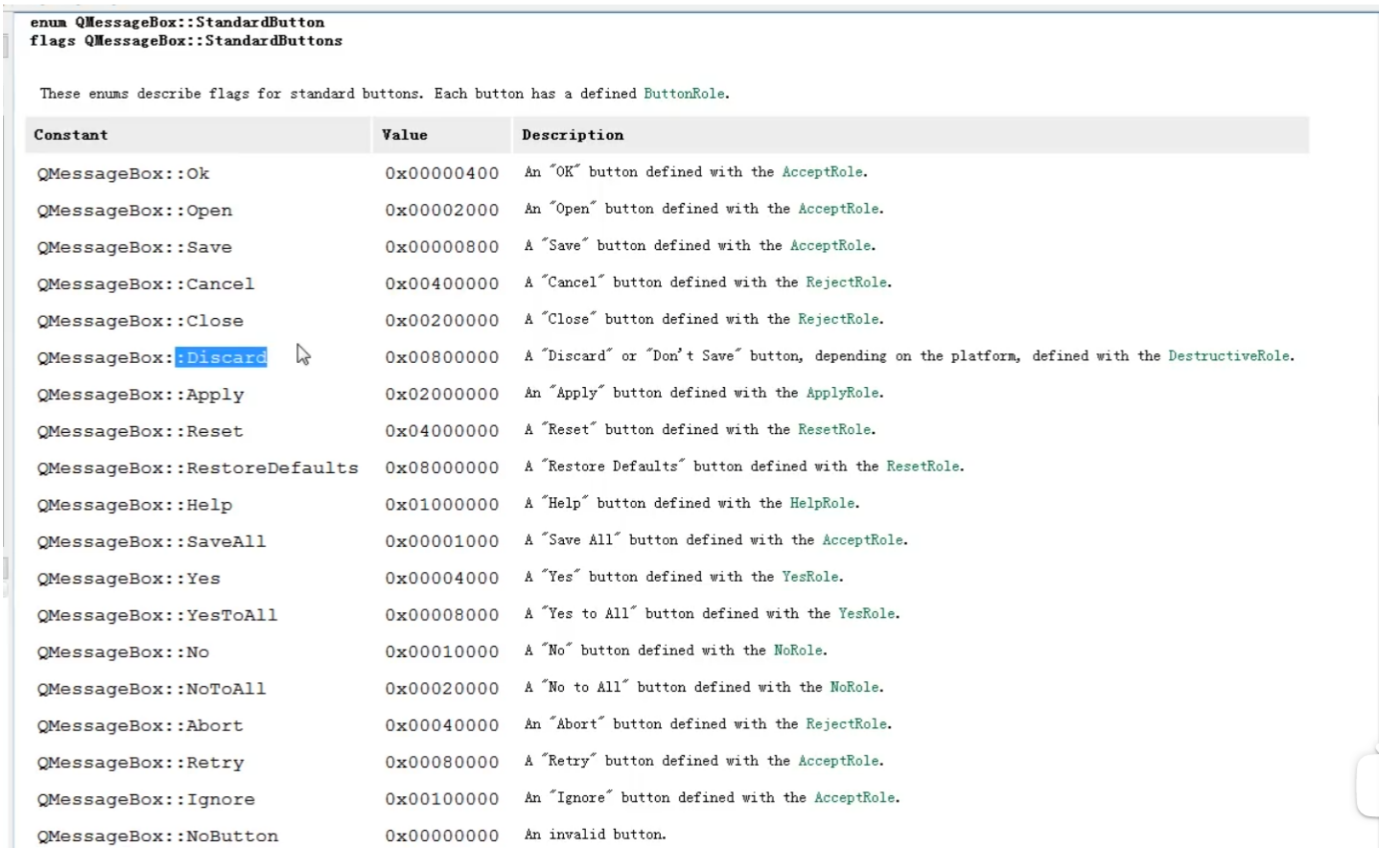
"错误");

信息");

no_2

第一步

查询帮助文档 寻找question的 yes | no 的可替换方案



enum QMessageBox::StandardButton
flags QMessageBox::StandardButtons

These enums describe flags for standard buttons. Each button has a defined ButtonRole.

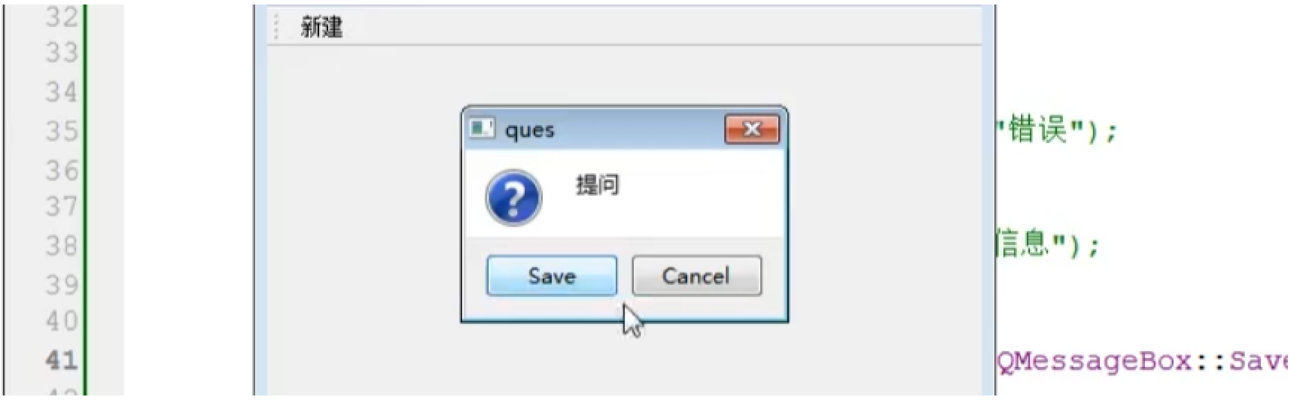
Constant	Value	Description
QMessageBox::Ok	0x00000400	An "OK" button defined with the AcceptRole.
QMessageBox::Open	0x00002000	An "Open" button defined with the AcceptRole.
QMessageBox::Save	0x00000800	A "Save" button defined with the AcceptRole.
QMessageBox::Cancel	0x00400000	A "Cancel" button defined with the RejectRole.
QMessageBox::Close	0x00200000	A "Close" button defined with the RejectRole.
QMessageBox::Discard	0x00800000	A "Discard" or "Don't Save" button, depending on the platform, defined with the DestructiveRole.
QMessageBox::Apply	0x02000000	An "Apply" button defined with the ApplyRole.
QMessageBox::Reset	0x04000000	A "Reset" button defined with the ResetRole.
QMessageBox::RestoreDefaults	0x08000000	A "Restore Defaults" button defined with the ResetRole.
QMessageBox::Help	0x01000000	A "Help" button defined with the HelpRole.
QMessageBox::SaveAll	0x00001000	A "Save All" button defined with the AcceptRole.
QMessageBox::Yes	0x00004000	A "Yes" button defined with the YesRole.
QMessageBox::YesToAll	0x00008000	A "Yes to All" button defined with the YesRole.
QMessageBox::No	0x00010000	A "No" button defined with the NoRole.
QMessageBox::NoToAll	0x00020000	A "No to All" button defined with the NoRole.
QMessageBox::Abort	0x00040000	An "Abort" button defined with the RejectRole.
QMessageBox::Retry	0x00080000	A "Retry" button defined with the AcceptRole.
QMessageBox::Ignore	0x00100000	An "Ignore" button defined with the AcceptRole.
QMessageBox::NoButton	0x00000000	An invalid button.

第二步

加入代码中

```
QMessageBox::question( this , "ques" , "提问",QMessageBox::Save | QMessageBox::Cancel)
```

第三步



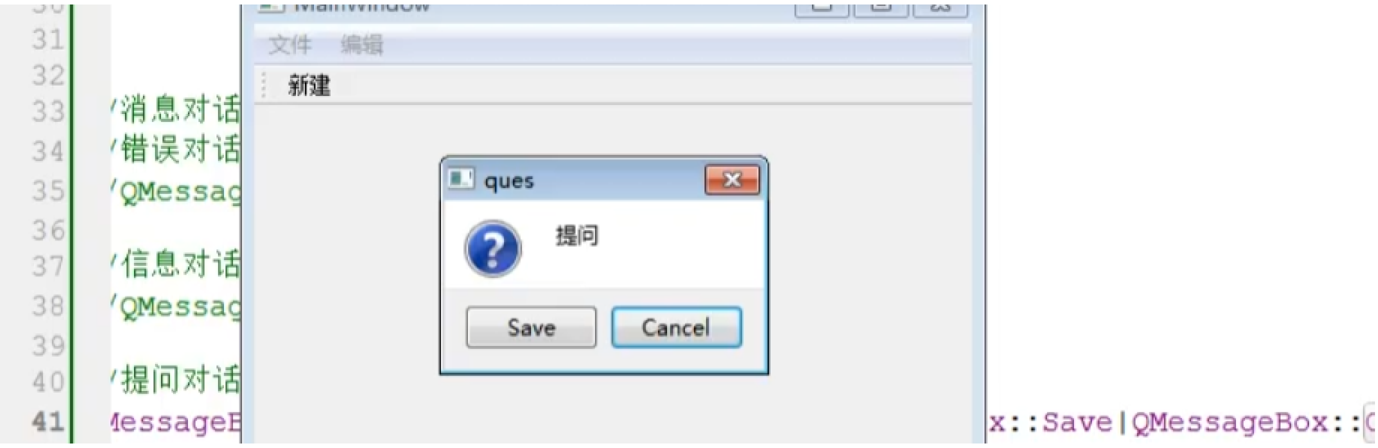
第四步

放置第五个参数

```
QMessageBox::question( this , "ques" , "提问",QMessageBox::Save |
QMessageBox::Cancel,QMessageBox::Cancel);
```

第五步

预览结果



```
/消息对话
/错误对话
/QMessag
/信息对话
/QMessag
/提问对话
lessageE                x::Save|QMessageBox::(
```

可以看到，默认选项更改为Cancel

总结：

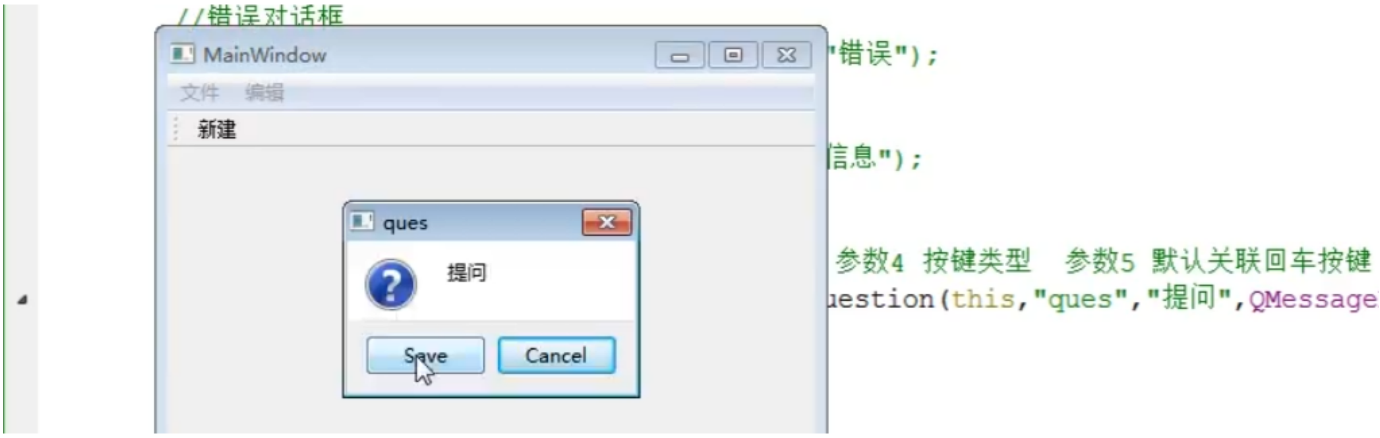
- □ 参数 1 父亲
- □ 参数 2 标题
- □ 参数 3 提示内容
- □ 参数 4 按键类型
- □ 参数 5 默认关联回车键

返回值类型——StandardButton

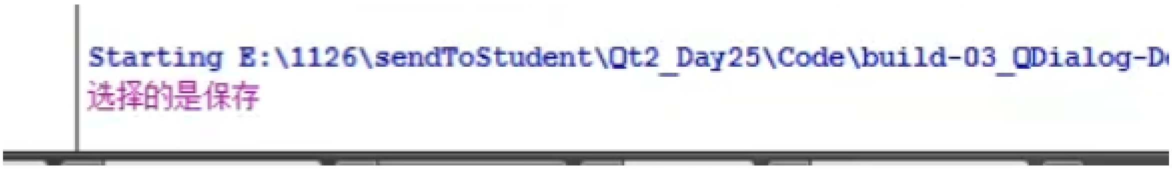
```
connect(ui->action3,&QAction::triggered,[=](){

        if(QMessageBox::Save==QMessageBox::question( this , "ques" , "提问",QMessageBox::Save |
QMessageBox::Cancel,QMessageBox::Cancel))
        {
            qDebug()<<"点击了save";
        }
        else
        {
            qDebug()<<"点击了calcel";
        }
    });
```

运行查看结果

点击save

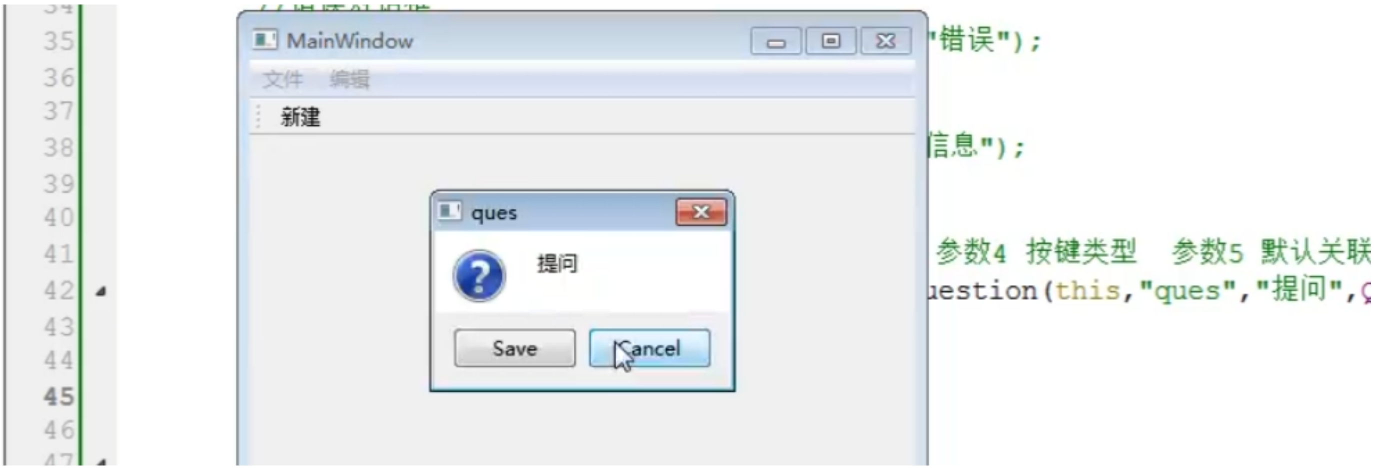


```
//错误对话框
"错误");

信息");

参数4 按键类型  参数5 默认关联回车按键
uestion(this,"ques","提问",QMessage
```

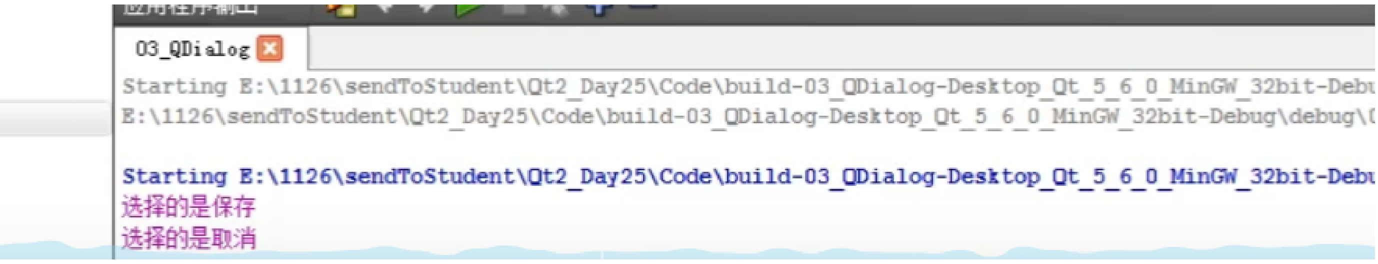


```
Starting E:\1126\sendToStudent\Qt2_Day25\Code\build-03_QDialog-D
选择的是保存
```

点击cancel



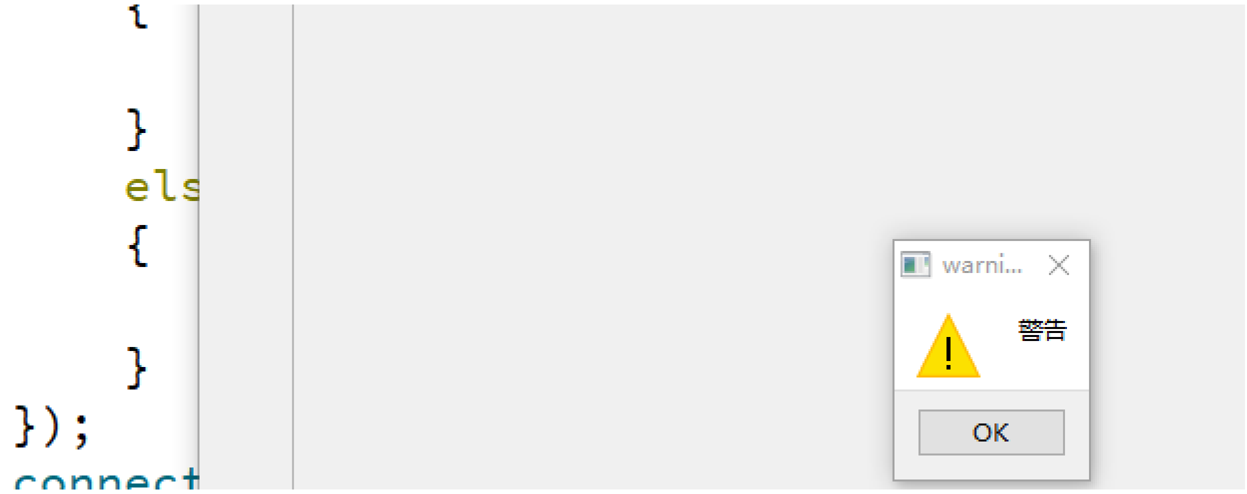
```
"错误");

信息");

参数4 按键类型  参数5 默认关联
uestion(this,"ques","提问",
```



```
Starting E:\1126\sendToStudent\Qt2_Day25\Code\build-03_QDialog-Desktop_Qt_5_6_0_MinGW_32bit-Debu
E:\1126\sendToStudent\Qt2_Day25\Code\build-03_QDialog-Desktop_Qt_5_6_0_MinGW_32bit-Debug\debug\

Starting E:\1126\sendToStudent\Qt2_Day25\Code\build-03_QDialog-Desktop_Qt_5_6_0_MinGW_32bit-Debu
选择的是保存
选择的是取消
```

警告对话框（warning）

```
connect(ui->action4,&QAction::triggered,[=](){
    QMessageBox::warning(this,"warning","警告");
    });
```



```
    {

    }
    els
    {

    }
});
connect
```

warni...

警告

自定义对话框

自定义模态对话框

不可以操作其他对话框

```
connect(ui->actionNew,&QAction::triggerend,[]()
{
 //对话框
 //模态对话框（阻塞：不可以对其他窗口进行操作）

 //模态------------------1
 QDialog dlg(this);
 dlg.exec();//阻塞
 dlg.resize(200,100);
 qDebug()<<"模态对话框弹出了！";//不会执行，再dlg.exec这一行阻塞了

})
```

自定义非模态对话框

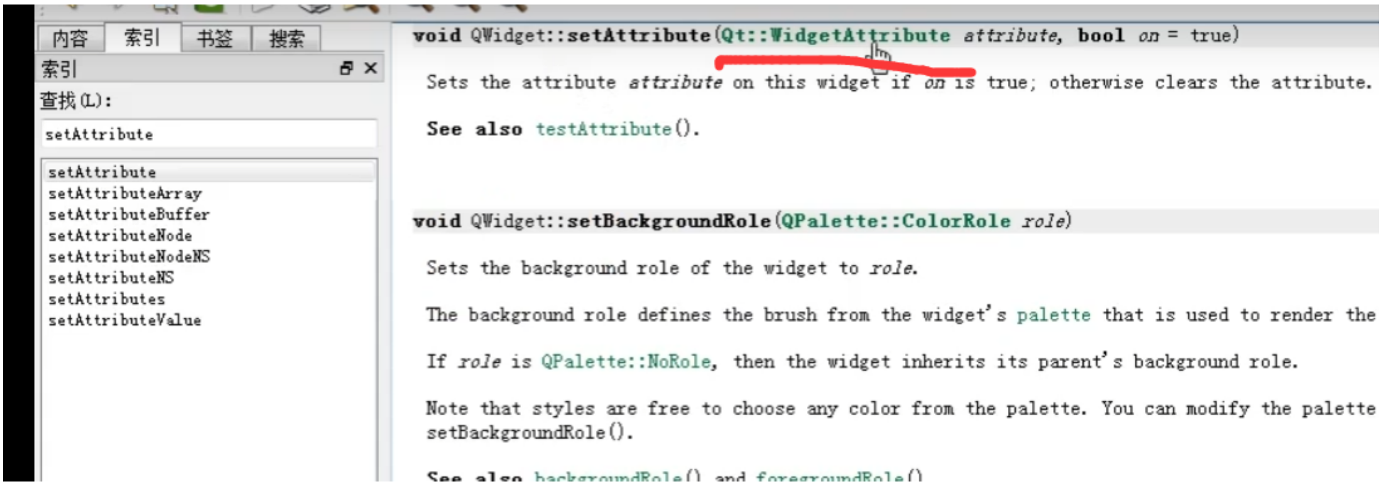
可以操作其他对话框

点击新建按钮 弹出对话框

```
connect(ui->actionNew,&QAction::triggerend,[]()
{
 //对话框
 //模态对话框（阻塞：不可以对其他窗口进行操作）

 //非模态可以对其他窗口进行操作

 //非模态----------------2
 QDialog dlg2(this);
 dig2.show();//再只进行这一行代码时吗，窗口会一闪而过
 //非模态，，修改版本
 QDialog *dlg = new QDialog(this);//防止一闪而过，将其创建到堆区
 dlg2->resize(200,100);
 dig2->show();
 dlg2->setAttribute(Qt::WA_DeleteOnClose);//55号   意为：在关闭操作时释放该对象
 //枚举值需要根据帮助文档进行查询
 qDebug()<<"非模态对话框弹出了！";//会执行   未被阻塞

})
```

枚举值查询：

第一步



void QWidget::setAttribute(Qt::WidgetAttribute *attribute*, **bool** *on* = true)

Sets the attribute *attribute* on this widget if *on* is true; otherwise clears the attribute.

See also testAttribute().

void QWidget::setBackgroundRole(QPalette::ColorRole *role*)

Sets the background role of the widget to *role*.

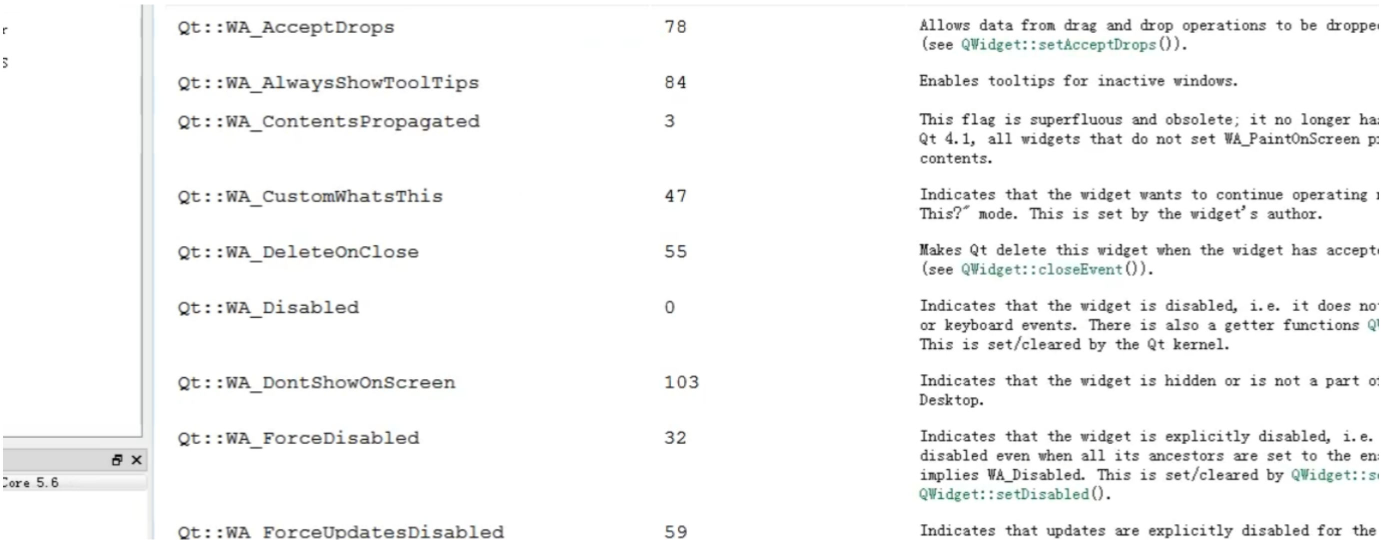
The background role defines the brush from the widget's palette that is used to render the

If *role* is QPalette::NoRole, then the widget inherits its parent's background role.

Note that styles are free to choose any color from the palette. You can modify the palette setBackgroundRole().

See also backgroundRole() and foregroundRole()

第二步



Qt::WA_AcceptDrops	78	Allows data from drag and drop operations to be droppe (see QWidget::setAcceptDrops()).
Qt::WA_AlwaysShowToolTips	84	Enables tooltips for inactive windows.
Qt::WA_ContentsPropagated	3	This flag is superfluous and obsolete; it no longer ha Qt 4.1, all widgets that do not set WA_PaintOnScreen p contents.
Qt::WA_CustomWhatsThis	47	Indicates that the widget wants to continue operating i This?" mode. This is set by the widget's author.
Qt::WA_DeleteOnClose	55	Makes Qt delete this widget when the widget has accept (see QWidget::closeEvent()).
Qt::WA_Disabled	0	Indicates that the widget is disabled, i.e. it does no or keyboard events. There is also a getter functions Q This is set/cleared by the Qt kernel.
Qt::WA_DontShowOnScreen	103	Indicates that the widget is hidden or is not a part o Desktop.
Qt::WA_ForceDisabled	32	Indicates that the widget is explicitly disabled, i.e. disabled even when all its ancestors are set to the en implies WA_Disabled. This is set/cleared by QWidget::s QWidget::setDisabled().
Qt::WA_ForceUpdatesDisabled	59	Indicates that updates are explicitly disabled for the

使用 value=55 即可