

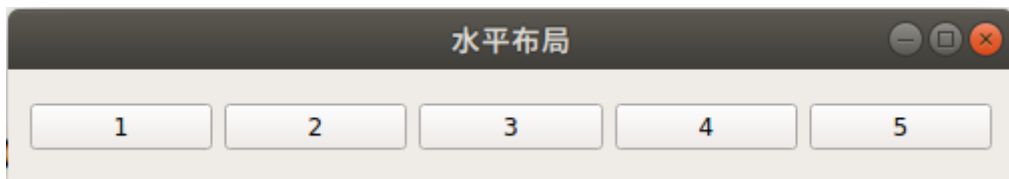
布局介绍

一个pyqt窗口中可以有多多个控件 所谓布局,指的就是多个控件在窗口中的展示方式

布局方式大致分为:

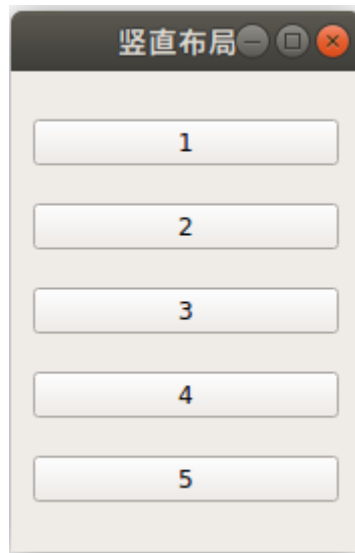
- 水平布局
- 竖直布局
- 网格布局
- 表单布局

水平布局QHBoxLayout



```
1 from PyQt5.Qtwidgets import *
2 from PyQt5.QtCore import *
3 from PyQt5.QtGui import QIcon
4 import sys
5
6 # 1.创建应用程序
7 app = QApplication(sys.argv)
8
9 # 2.创建窗口
10 w = QWidget()
11
12 # 修改窗口标题
13 w.setWindowTitle('水平布局')
14 """----- 创建按钮 -----"""
15 btn1 = QPushButton('1')
16 btn2 = QPushButton('2')
17 btn3 = QPushButton('3')
18 btn4 = QPushButton('4')
19 btn5 = QPushButton('5')
20 # 创建布局
21 layout = QHBoxLayout()
22 # 添加布局到窗口中
23 w.setLayout(layout)
24 # 按钮控件添加到布局中
25 layout.addWidget(btn1)
26 layout.addWidget(btn2)
27 layout.addWidget(btn3)
28 layout.addWidget(btn4)
29 layout.addWidget(btn5)
30
31
32 # 3.显示窗口
33 w.show()
34
35 # 4.等待窗口停止
36 sys.exit(app.exec())
```

垂直布局QVBoxLayout



```
1 from PyQt5.QtWidgets import *
2 from PyQt5.QtCore import *
3 from PyQt5.QtGui import *
4 import sys
5
6 # 1.创建应用程序
7 app = QApplication(sys.argv)
8
9 # 2.创建窗口
10 w = QWidget()
11
12 # 修改窗口标题
13 w.setWindowTitle('竖直布局')
14 """----- 创建5个按钮 -----"""
15 btn1 = QPushButton('1')
16 btn2 = QPushButton('2')
17 btn3 = QPushButton('3')
18 btn4 = QPushButton('4')
19 btn5 = QPushButton('5')
20
21 # 创建布局
22 layout = QVBoxLayout()
23 # 布局添加到窗口中
24 w.setLayout(layout)
25
26 # 控件添加到布局中
27 layout.addWidget(btn1)
28 layout.addWidget(btn2)
29 layout.addWidget(btn3)
30 layout.addWidget(btn4)
31 layout.addWidget(btn5)
32
33 # 3.显示窗口
34 w.show()
35
36 # 4.等待窗口停止
37 sys.exit(app.exec())
```

表单布局QFormLayout



```
1 from PyQt5.Qtwidgets import *
2 from PyQt5.QtCore import *
3 from PyQt5.QtGui import *
4 import sys
5
6 def func():
7     name = nameEdit.text()
8     age = int(ageEdit.text())
9     phone = phoneEdit.text()
10    print('姓名:%s,年纪:%d,电话:%s'%(name,age,phone))
11
12    # 1.创建应用程序
13    app = QApplication(sys.argv)
14
15    # 2.创建窗口
16    w = QWidget()
17
18
19    # 修改窗口标题
20    w.setWindowTitle('表单布局')
21    """----- 创建布局 -----"""
22    layout = QFormLayout()
23    # 添加到窗口中
24    w.setLayout(layout)
25
26    # 输入框
27    nameEdit = QLineEdit()
28    ageEdit = QLineEdit()
29    phoneEdit = QLineEdit()
30    btn = QPushButton('发送')
31
32    # 添加到布局中
33    layout.addRow('姓名',nameEdit)
34    layout.addRow('年纪',ageEdit)
35    layout.addRow('电话',phoneEdit)
36    layout.addRow('',btn)
37
38    # 信号和槽绑定
39    btn.clicked.connect(func)
40
41
42    # 3.显示窗口
43    w.show()
44
```

```
45 # 4.等待窗口停止
46 sys.exit(app.exec())
```

网格布局QGridLayout



```
1 from PyQt5.Qtwidgets import *
2 from PyQt5.QtCore import *
3 from PyQt5.QtGui import *
4 import sys
5
6
7 # 1.创建应用程序
8 app = QApplication(sys.argv)
9
10 # 2.创建窗口
11 w = QWidget()
12
13 # 修改窗口标题
14 w.setWindowTitle('表单布局')
15 """----- 创建布局 -----"""
16 layout = QGridLayout()
17 # 添加到窗口中
18 w.setLayout(layout)
19
20 for i in range(4):
21     for j in range(4):
22         btn = QPushButton("按钮 {} {}".format(i, j))
23
24         layout.addWidget(btn, i, j)
25
26 # 3.显示窗口
27 w.show()
28
29 # 4.等待窗口停止
30 sys.exit(app.exec())
```