## Pegar en Main.py

```
class DartEditorCode(QPlainTextEdit):
   class NumberBar(QWidget):
            QWidget. init (self, editor)
            self.editor = editor
self.editor.blockCountChanged.connect(self.updateWidth)
self.editor.updateRequest.connect(self.updateContents)
            self.font = QFont()
            self.numberBarColor = QColor("#2F2F36")
        def paintEvent(self, event):
            painter = QPainter(self)
self.numberBarColor)
            block = self.editor.firstVisibleBlock()
            while block.isValid():
                block top = self.editor.blockBoundingGeometry(
block).translated(self.editor.contentOffset()).top()
event.rect().bottom():
self.editor.textCursor().blockNumber():
                  self.font.setBold(True)
```

```
painter.setPen(QColor("#2F2F36"))
                    self.font.setBold(False)
                    painter.setPen(QColor("#2F2F36"))
                painter.setFont(self.font)
                paint rect = QRect(0, block top, self.width(),
self.editor.fontMetrics().height())
                painter.drawText(paint rect, Qt.AlignRight,
str(blockNumber+1))
                block = block.next()
            QWidget.paintEvent(self, event)
        def getWidth(self):
            count = self.editor.blockCount()
            width = self.fontMetrics().width(str(count)) + 10
            return width
        def updateWidth(self):
            width = self.getWidth()
            if self.width() != width:
                self.setFixedWidth(width)
                self.editor.setViewportMargins(width, 0, 0, 0)
        def updateContents(self, rect, scroll):
                self.scroll(0, scroll)
                self.update(0, rect.y(), self.width(),
rect.height())
            if rect.contains(self.editor.viewport().rect()):
```

```
self.editor.currentCharFormat().font().pointSize()
                self.font.setPointSize(fontSize)
                self.font.setStyle(QFont.StyleNormal)
                self.updateWidth()
    def init (self, DISPLAY LINE NUMBERS=True,
HIGHLIGHT CURRENT LINE=True):
        super(DartEditorCode, self). init ()
        self.setFont(QFont("Ubuntu Mono", 11))
        self.setLineWrapMode(QPlainTextEdit.NoWrap)
        self.DISPLAY LINE NUMBERS = DISPLAY LINE NUMBERS
            self.number bar = self.NumberBar(self)
        if HIGHLIGHT CURRENT LINE:
            self.currentLineNumber = None
            self.currentLineColor = QColor("#FDFDFD")
self.cursorPositionChanged.connect(self.highligtCurrentLine)
    def resizeEvent(self, *e):
        if self.DISPLAY LINE NUMBERS:
            cr = self.contentsRect()
            rec = QRect(cr.left(), cr.top(),
                        self.number bar.getWidth(),
            self.number bar.setGeometry(rec)
        OPlainTextEdit.resizeEvent(self, *e)
    def highligtCurrentLine(self):
        newCurrentLineNumber = self.textCursor().blockNumber()
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if newCurrentLineNumber != self.currentLineNumber:
            self.currentLineNumber = newCurrentLineNumber
            hi selection = QTextEdit.ExtraSelection()
hi selection.format.setBackground(self.currentLineColor)
                OTextFormat.FullWidthSelection, True)
            hi selection.cursor = self.textCursor()
            hi selection.cursor.clearSelection()
            self.setExtraSelections([hi selection])
class CodeLabel(QWidget):
   def init (self):
        super(CodeLabel, self). init ()
        layout = QHBoxLayout()
        label1 txt = QLabel()
        label1 txt.setText("<h4>Write or Paste your copy here:
</h4>")
        self.setLayout(layout)
# Print Label Component
class PrintLabel(QWidget):
   def init (self):
        super(PrintLabel, self). init ()
        vb = QVBoxLayout()
       hb layout = QHBoxLayout()
       label text = QLabel()
       plain text = QPlainTextEdit()
</strong>")
```

```
plain_text.setStyleSheet("background-color: #E5E8ED;")

hb_layout.addWidget(label_text)

hb_layout.addStretch(1)

vb.addLayout(hb_layout)

vb.addWidget(plain_text)

self.setLayout(vb)
```

```
CODE
from PyQt5.QtWidgets import *
from PyQt5.QtCore import *
from PyQt5.QtGui import *
from lexico import *
from sintactico import *
from errorHandle import *
# Editor Code Component
class DartEditorCode(QPlainTextEdit):
   class NumberBar(QWidget):
            QWidget. init (self, editor)
            self.editor = editor
self.editor.blockCountChanged.connect(self.updateWidth)
self.editor.updateRequest.connect(self.updateContents)
            self.font = QFont()
            self.numberBarColor = QColor("#2F2F36")
        def paintEvent(self, event):
            painter = QPainter(self)
self.numberBarColor)
            block = self.editor.firstVisibleBlock()
            while block.isValid():
                block top = self.editor.blockBoundingGeometry(
```

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event.rect().bottom():
                    break
                if blockNumber ==
self.editor.textCursor().blockNumber():
                    self.font.setBold(True)
                    painter.setPen(QColor("#2F2F36"))
                    self.font.setBold(False)
                    painter.setPen(QColor("#2F2F36"))
                painter.setFont(self.font)
                paint rect = QRect(0, block top, self.width(),
self.editor.fontMetrics().height())
                painter.drawText(paint rect, Qt.AlignRight,
str(blockNumber+1))
                block = block.next()
            QWidget.paintEvent(self, event)
        def getWidth(self):
            count = self.editor.blockCount()
            width = self.fontMetrics().width(str(count)) + 10
        def updateWidth(self):
            width = self.getWidth()
            if self.width() != width:
                self.setFixedWidth(width)
```

```
def updateContents(self, rect, scroll):
                self.scroll(0, scroll)
                self.update(0, rect.y(), self.width(),
rect.height())
            if rect.contains(self.editor.viewport().rect()):
self.editor.currentCharFormat().font().pointSize()
                self.font.setPointSize(fontSize)
                self.font.setStyle(QFont.StyleNormal)
                self.updateWidth()
HIGHLIGHT CURRENT LINE=True):
        super(DartEditorCode, self). init ()
        self.setFont(QFont("Ubuntu Mono", 11))
        self.setLineWrapMode(QPlainTextEdit.NoWrap)
            self.number bar = self.NumberBar(self)
            self.currentLineNumber = None
            self.currentLineColor = QColor("#FDFDFD")
self.cursorPositionChanged.connect(self.highligtCurrentLine)
   def resizeEvent(self, *e):
            cr = self.contentsRect()
            rec = QRect(cr.left(), cr.top(),
```

```
self.number bar.getWidth(),
cr.height())
            self.number bar.setGeometry(rec)
       OPlainTextEdit.resizeEvent(self, *e)
   def highligtCurrentLine(self):
       newCurrentLineNumber = self.textCursor().blockNumber()
       if newCurrentLineNumber != self.currentLineNumber:
            self.currentLineNumber = newCurrentLineNumber
           hi selection = QTextEdit.ExtraSelection()
hi selection.format.setBackground(self.currentLineColor)
                QTextFormat.FullWidthSelection, True)
           hi selection.cursor = self.textCursor()
            self.setExtraSelections([hi selection])
class CodeLabel(QWidget):
   def init (self):
       super(CodeLabel, self). init ()
       layout = QHBoxLayout()
       label1 txt = QLabel()
</h4>")
       self.setLayout(layout)
class PrintLabel(QWidget):
   def init (self):
       super(PrintLabel, self). init ()
       vb = QVBoxLayout()
       hb layout = QHBoxLayout()
```

```
label text = QLabel()
        plain text = QPlainTextEdit()
</strong>")
        hb layout.addStretch(1)
        self.setLayout(vb)
class Buttons(QWidget):
        layout = QVBoxLayout()
        button lexer = QPushButton("Run Lexer")
        button lexer.setCursor(QCursor(Qt.PointingHandCursor))
self.onClickLexer())
        button parser = QPushButton("Run Parser")
        button parser.setFixedSize(100, 40)
button parser.setCursor(QCursor(Qt.PointingHandCursor))
self.onClickParser())
        button openFile = QPushButton("Open File")
```

```
button openFile.setCursor(QCursor(Qt.PointingHandCursor))
self.openFile(editor))
        self.setLayout(layout)
    def onClickLexer(self, editor, print label):
        tp.setPlainText("")
        handleError()
        tokens = runLexerAnalyzer(editor.toPlainText())
                f"Number of lexer errors:
{handleError.lexer err}\n")
{:4}".format(tok.value, tok.type))
                tp.insertPlainText("\n")
        tp.insertPlainText("\n")
        tp.insertPlainText("\n")
    def onClickedParser(self, editor, print label):
        tp.insertPlainText("Syntactic Analysis Output\n")
        handleError()
```

```
{handleError.syntax err}\n")
        if handleError.syntax err:
                f"Number of syntax errors:
{handleError.syntax err}\n")
tp.insertPlainText(handleError.syntax err descript)
handleError.syntax err:
    def openFile(self, editor):
        fileSelected = QFileDialog.getOpenFileName()
# Main Component
class MainApp(QMainWindow):
    def init (self):
        super(). init ()
        self.geometry = (100, 100, 900, 600)
        self.setStyleSheet("background-color: #E5E8ED;")
    def mountComponents(self):
        self.setWindowTitle(self.title)
        codeLabel = CodeLabel()
        titulo = QLabel()
        titulo.setText("Analizador Dart")
```

```
titulo.setStyleSheet("font-size: 16px; font-weight:
bold; text-align: center;")
    layout_v1 = QHBoxLayout()
    layout_v2 = QHBoxLayout()
    layout_v1.addWidget(titulo)
    layout_v1.setAlignment(Qt.AlignCenter)
    layout_v2.addWidget(codeLabel)
    main_layout = QVBoxLayout()
    main_layout.addLayout(layout_v1)
    main_layout.addLayout(layout_v2)
    widget = QWidget(self)
    widget.setLayout(main_layout)
    self.setCentralWidget(widget)

if __name__ == "__main__":
    app = QApplication([])
    mainWindow = MainApp()
    mainWindow.show()
    app.exec_()
```