

**IT Technology
LIN 16 Linux
The Environment and
Customizing the Prompt
2017.05.07**



Lillebaelt Academy of
Professional Higher Education

Author:
Milan Kristof Vince:
mila1025@edu.eal.dk

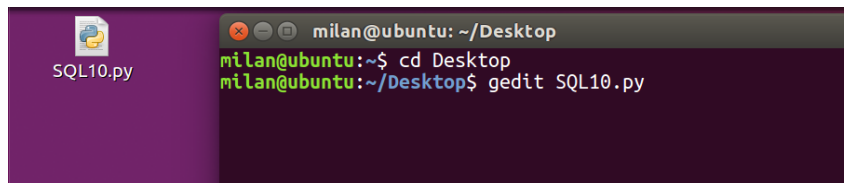
May, 07, 2017

Introduction

This document shows the Environment on Linux machines, and some of the inner workings of the shell and the terminal emulator program itself.

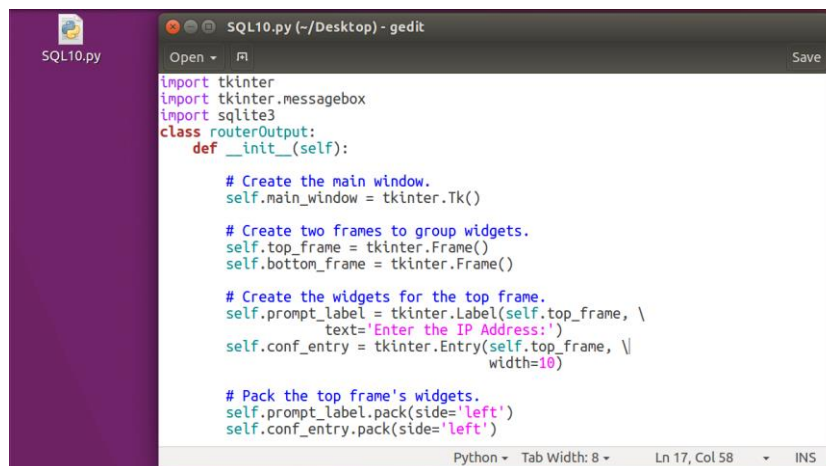
11 The Environment – Using a Text Editor

All text editors can be started from the command by typing the name of the editor, followed the file name what we want to edit. If the file does not exist the editor assumes we want to create a new one. For example:



```
milan@ubuntu: ~/Desktop
milan@ubuntu:~$ cd Desktop
milan@ubuntu:~/Desktop$ gedit SQL10.py
```

This command will start the typed text editor and load the written file up there:



```
SQL10.py (~/Desktop) - gedit
Open Save
import tkinter
import tkinter.messagebox
import sqlite3
class routerOutput:
    def __init__(self):
        # Create the main window.
        self.main_window = tkinter.Tk()

        # Create two frames to group widgets.
        self.top_frame = tkinter.Frame()
        self.bottom_frame = tkinter.Frame()

        # Create the widgets for the top frame.
        self.prompt_label = tkinter.Label(self.top_frame, \
            text='Enter the IP Address:')
        self.conf_entry = tkinter.Entry(self.top_frame, \
            width=10)

        # Pack the top frame's widgets.
        self.prompt_label.pack(side='left')
        self.conf_entry.pack(side='left')

Python Tab Width: 8 Ln 17, Col 58 INS
```

12 Gentle introduction to vi (used nano instead) – Edit modes

Let's start up nano, which can be lifesaver if we does not have graphical interface, like remote server or local system with a broken configuration. (I was running a linux vm and lost the graphical interface due to there is not space left on the machine.)

When we start up and write a new filename which did not exist before, it will create a new one automatically:

```
milan@ubuntu:~$ nano random.txt
```



We got the result as we have a new txt file because we opened with the text editor.

13 Customizing the prompt – Some alternative prompt designs.

We are able to change the prompt to see the effect. First, we will back up the existing string, so we could restore it later. To do this, we will copy the existing string into another shell variable, what we create by ourselves:

```
milan@ubuntu:~$ ps1_old="$PS1"
```

We created a new variable what's called *ps1_old* and assign the value of *PS1* to it.

We can verify that the string has been copied by using the *echo* command:

```
milan@ubuntu:~$ echo $ps1_old  
\[ \e]0;\u@\h: \w\a\}${debian_chroot:+($debian_chroot)}\[ \033[01;32m\]\u@\h\[ \033[00m\]:\[ \033[01;34m\]\w\[ \033[00m\]\$
```

13 Customizing the prompt – Adding Color

We can easily change the character color in the terminal. There are several colors and codes, this time I am going to show how to change the characters to red prompt:

```
milan@ubuntu:~$ PS1="\[ \033[0;31m\]<\u@\h \w>\$ "  
<milan@ubuntu ~>$
```

This works please notice that all the text we typed after the prompt is also red.

Conclusion

I found a few more interesting commands, but it would be way more than 2 pages. Interesting topic, I learned some useful commands today. ☺

Rest of my test is available here: <https://github.com/Millix95/Linux>