

```

1 ; Name      : tooltip.asm
2 ;
3 ; Build     : aclocal && autoconf && automake --add-missing --foreign
4 ;           mkdir build
5 ;           cd build
6 ;           ../configure
7 ;           make
8 ;
9 ; Description : tooltip demo
10 ;
11 ; Source    : http://zetcode.com/gui/gtk2/firstprograms/
12
13 bits 64
14
15 [list -]
16     extern  gtk_init
17     extern  gtk_window_new
18     extern  gtk_window_set_title
19     extern  gtk_window_set_default_size
20     extern  gtk_container_set_border_width
21     extern  gtk_button_new_with_label
22     extern  gtk_widget_set_tooltip_text
23     extern  gtk_alignment_new
24     extern  gtk_container_add
25     extern  gtk_widget_show_all
26     extern  gtk_main_quit
27     extern  g_signal_connect_data
28     extern  gtk_main
29     extern  exit
30 [list +]
31
32 section .rodata
33     title:      db  "Tooltip", 0
34     szDestroy:  db  "destroy", 0
35     caption:    db  "Button", 0
36     tooltip:    db  "Button Widget",0
37
38 section .data
39     window:     dq  0
40     button:     dq  0
41     halign:     dq  0
42
43 section .text
44
45 global _start
46 _start:
47     ;init gtk
48     xor     rsi,rsi                ;argv
49     xor     rdi,rdi                ;argc
50     call    gtk_init
51     ;the main window
52     xor     rdi,rdi                ;GTK_WINDOW_TOPLEVEL
53     call    gtk_window_new
54     mov     qword[window],rax
55     ;set title
56     mov     rdi,qword[window]
57     mov     rsi,title
58     call    gtk_window_set_title
59     ;set size
60     mov     rdi,qword[window]
61     mov     rsi,300                ;width
62     mov     rdx,200                ;height
63     call    gtk_window_set_default_size
64     ;set border width
65     mov     rdi,qword[window]
66     mov     rsi,15                 ;borderwidth
67     call    gtk_container_set_border_width
68     ;create a button
69     mov     rdi,caption
70     call    gtk_button_new_with_label
71     mov     qword[button],rax
72     ;set the button tooltip
73     mov     rdi,qword[button]

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74  mov     rsi,tooltip
75  call    gtk_widget_set_tooltip_text
76  ;horizontal alignment
77  xor     rdi,rdi
78  xor     rsi,rsi
79  xor     rdx,rdx
80  call    gtk_alignment_new
81  mov     qword[halign],rax
82  ;add the button to the halign container
83  mov     rdi,qword[halign]
84  mov     rsi,qword[button]
85  call    gtk_container_add
86  ;add the halign container to the window
87  mov     rdi,qword[window]
88  mov     rsi,qword[halign]
89  call    gtk_container_add
90  ;show window
91  mov     rdi,qword[window]
92  call    gtk_widget_show_all
93  ;connect destroy signal to the window
94  xor     r9d,r9d                ;combination of GConnectFlags
95  xor     r8d,r8d                ;a GClosureNotify for data
96  mov     rcx,qword[window]      ;pointer to window instance in RCX
97  mov     rdx,gtk_main_quit      ;pointer to the handler
98  mov     rsi,szDestroy          ;pointer to the signal
99  mov     rdi,qword[window]      ;pointer to window instance in RDI
100 call    g_signal_connect_data ;the value in RAX is the handler, but we don't store
    it now
101 ;go into application main loop
102 call    gtk_main
103 ;exit program
104 xor     rdi,rdi
105 call    exit
106

```