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Roll No.: 69

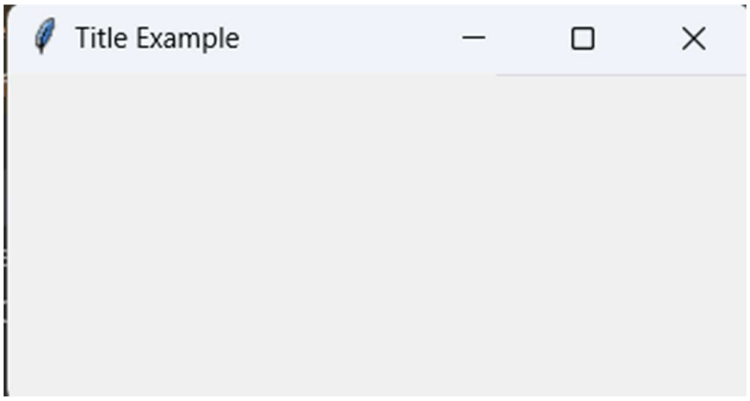
Experiment No.12:

Aim: Write a python program to implement GUI Tools, using Tkinter.

Code and Output:

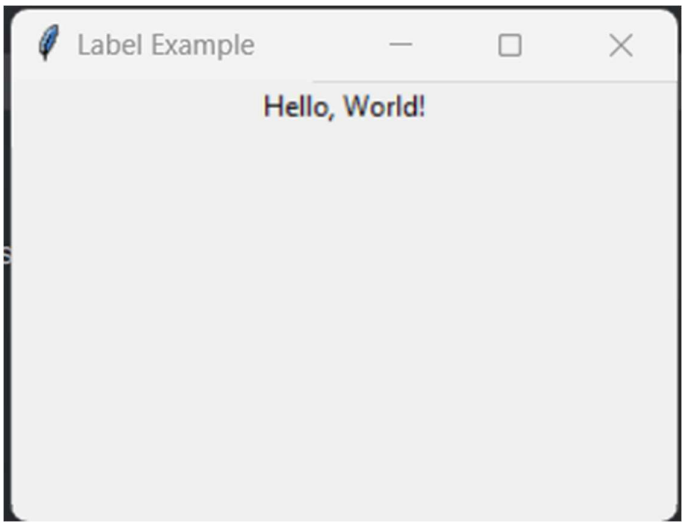
1. **Title:**

```python
import tkinter as tk

window = tk.Tk()
window.title("Title Example")

window.mainloop()

```



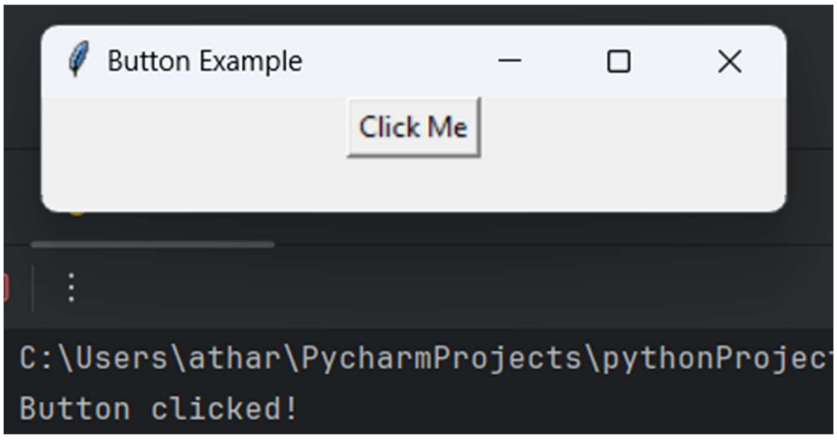
2. **Label:**

```python
import tkinter as tk

window = tk.Tk()
window.title("Label Example")

label = tk.Label(window, text="Hello, World!")
label.pack()

window.mainloop()

```



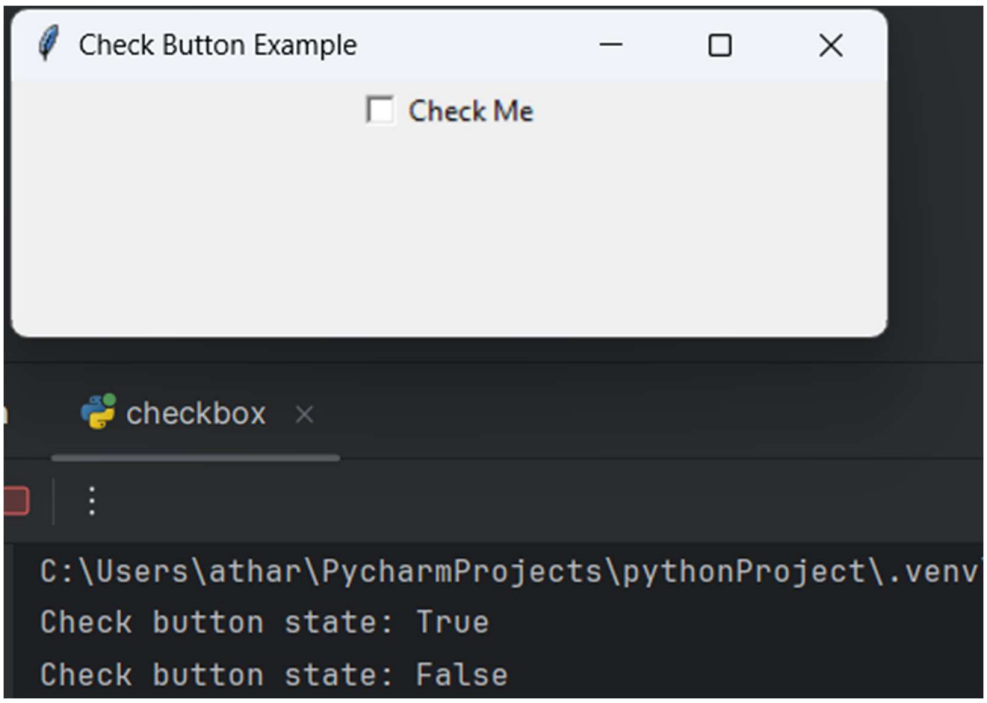
3. **Button:**

```python
import tkinter as tk

1 usage
def button_clicked():
    print("Button clicked!")

window = tk.Tk()
window.title("Button Example")

button = tk.Button(window, text="Click Me", command=button_clicked)
button.pack()

window.mainloop()
```



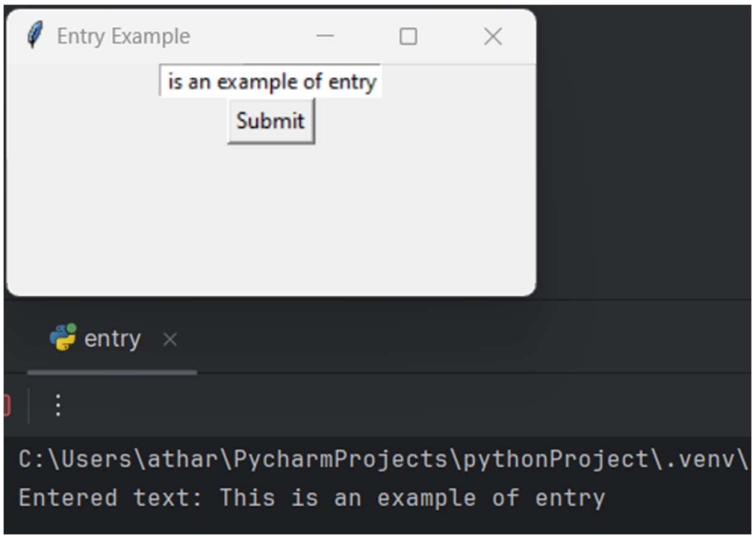
4. **Check Button:**

```python
import tkinter as tk

1 usage
def check_button_clicked():
    print("Check button state:", var.get())

window = tk.Tk()
window.title("Check Button Example")

var = tk.BooleanVar()
check_button = tk.Checkbutton(window, text="Check Me", variable=var, command=check_button_clicked)
check_button.pack()

window.mainloop()

```



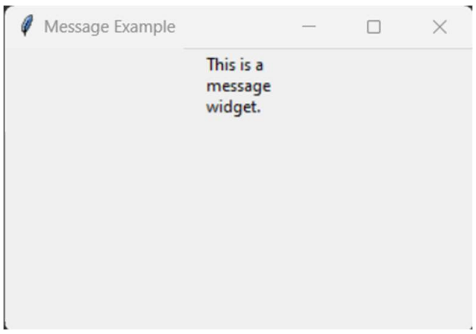
5. Entry

```python
import tkinter as tk

1 usage
def entry_submitted():
    print("Entered text:", entry.get())

window = tk.Tk()
window.title("Entry Example")

entry = tk.Entry(window)
entry.pack()

submit_button = tk.Button(window, text="Submit", command=entry_submitted)
submit_button.pack()

window.mainloop()

```



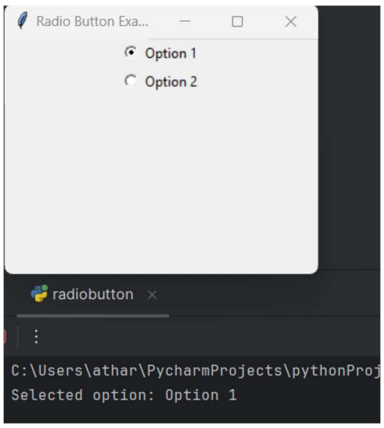
6. Message

```python
import tkinter as tk

window = tk.Tk()
window.title("Message Example")

message = tk.Message(window, text="This is a message widget.")
message.pack()

window.mainloop()

```



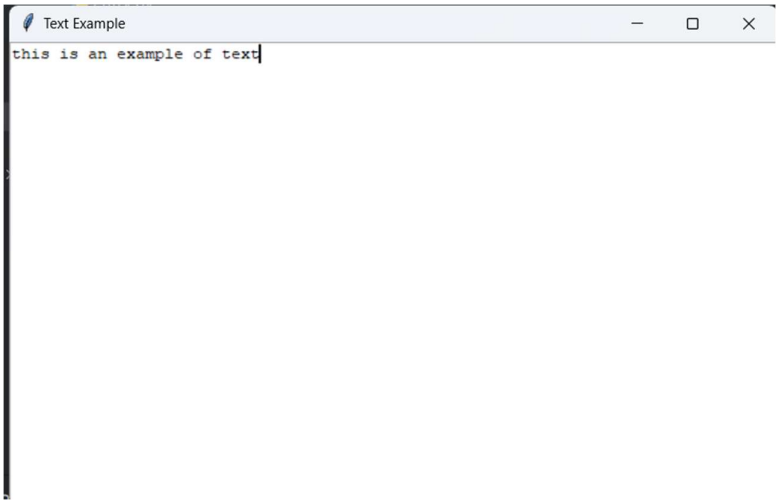
7. Radio Button

```python
import tkinter as tk

2 usages
def radio_button_selected():
    print("Selected option:", var.get())

window = tk.Tk()
window.title("Radio Button Example")

var = tk.StringVar()
radio_button1 = tk.Radiobutton(window, text="Option 1", variable=var, value="Option 1", command=radio_button_selected)
radio_button1.pack()

radio_button2 = tk.Radiobutton(window, text="Option 2", variable=var, value="Option 2", command=radio_button_selected)
radio_button2.pack()

window.mainloop()
```



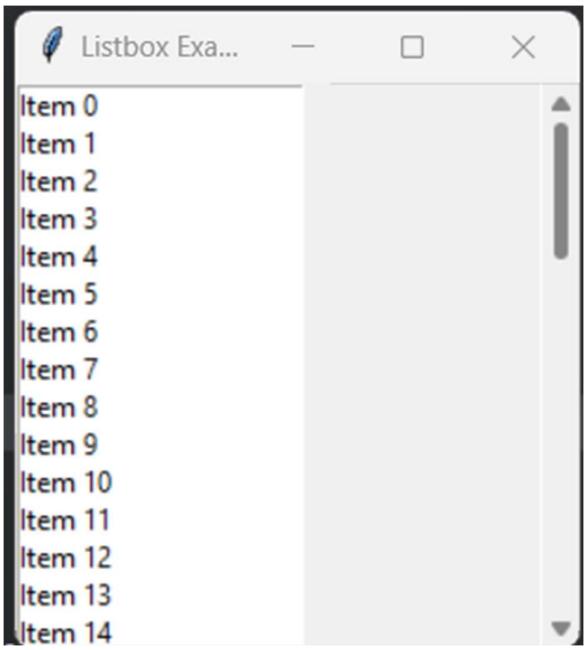
8. Text

```python
import tkinter as tk

window = tk.Tk()
window.title("Text Example")

text = tk.Text(window)
text.pack()

window.mainloop()
```



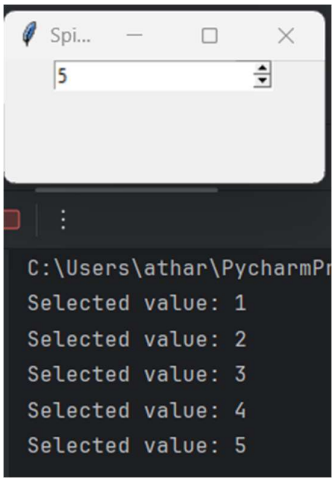
9. Scroll bar and Listbox

```
import tkinter as tk

window = tk.Tk()
window.title("Listbox Example")

scrollbar = tk.Scrollbar(window)
scrollbar.pack(side=tk.RIGHT, fill=tk.Y)

listbox = tk.Listbox(window, yscrollcommand=scrollbar.set)
for i in range(50):
    listbox.insert(tk.END, *elements: "Item " + str(i))
listbox.pack(side=tk.LEFT, fill=tk.BOTH)

scrollbar.config(command=listbox.yview)

window.mainloop()

```



10. SpinBox:

```
import tkinter as tk

1 usage
def spin_box_changed():
    print("Selected value:", spin_box.get())

window = tk.Tk()
window.title("Spin Box Example")

spin_box = tk.Spinbox(window, from_=0, to=10, command=spin_box_changed)
spin_box.pack()

window.mainloop()
```



11. Canvas

```python
import tkinter as tk

window = tk.Tk()
window.title("Canvas Example")

canvas = tk.Canvas(window, width=200, height=100, bg="white")
canvas.pack()

canvas.create_rectangle(50, 25, 150, 75, fill="blue")

window.mainloop()

```