COUNTDOWN TIMER-

COUNTDOWNTIMER1.py - C:/Users/acer/Desktop/Countdown Timer/COUNTDOWNTIMER1.py (3.10.6)

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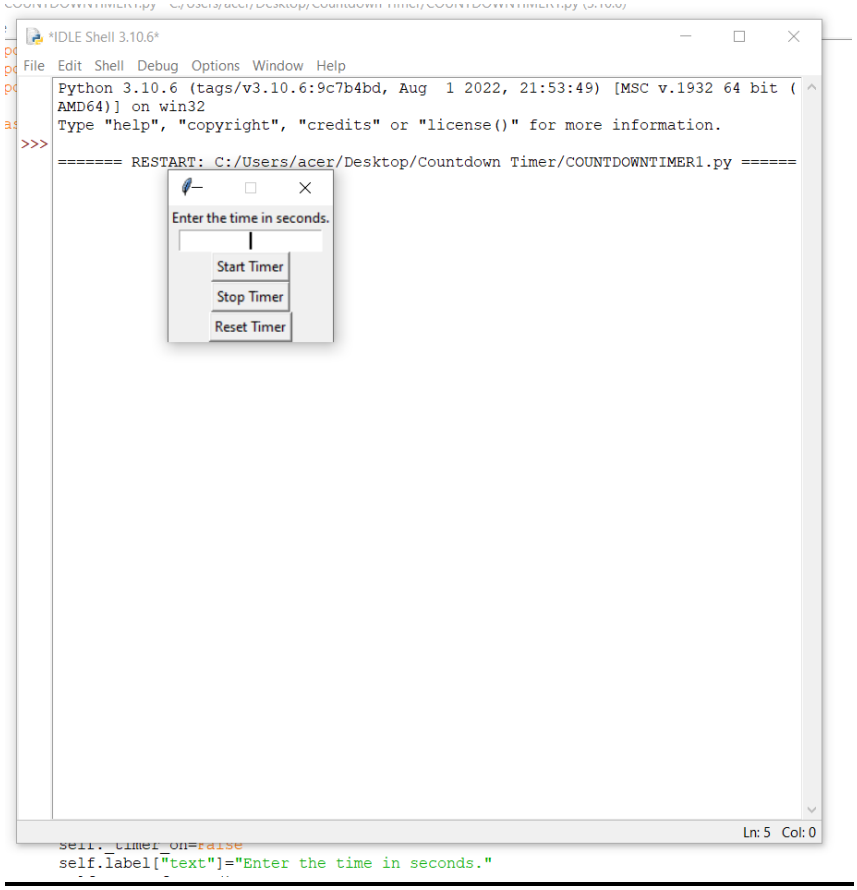
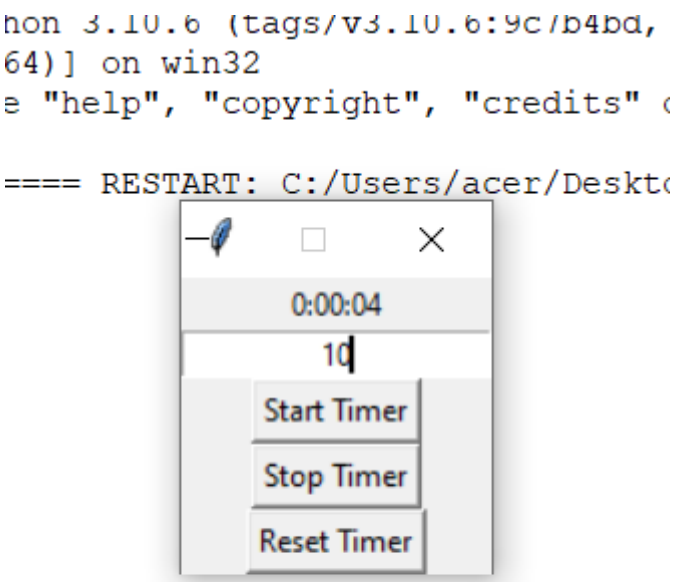
```
import tkinter as tk
import datetime
import winsound as ws

class Countdown(tk.Frame):
    def __init__(self,master):
        super().__init__(master)
        self.create_widgets()
        self.show_widgets()
        self.seconds_left=0
        self._timer_on=False

    def show_widgets(self):
        self.label.pack()
        self.entry.pack()
        self.start.pack()
        self.stop.pack()
        self.reset.pack()

    def create_widgets(self):
        self.label=tk.Label(self,text="Enter the time in seconds.")
        self.entry=tk.Entry(self,justify="center")
        self.entry.focus_set()
        self.reset=tk.Button(self,text="Reset Timer",
                             command=self.reset_button)
        self.stop=tk.Button(self,text="Stop Timer",
                            command=self.stop_button)
        self.start=tk.Button(self,text="Start Timer",
                             command=self.start_button)
```

```
    def countdown(self):
        self.label["text"]=self.convert_seconds_left_to_time()

        if self.seconds_left:
            self.seconds_left-=1
            self._timer_on=self.after(1000,self.countdown)
        else:
            self._timer_on=False
            ws.PlaySound("Alarm Clock Sound",ws.SND_FILENAME)
    def reset_button(self):
        self.seconds_left=0
        self.stop_timer()
        self._timer_on=False
        self.label["text"]="Enter the time in seconds."
        self.start.forget()
        self.stop.forget()
        self.reset.forget()
        self.stop.pack()
        self.reset.pack()


    def stop_button(self):
        self.seconds_left=int(self.entry.get())
        self.stop_timer()

    def start_button(self):
        self.seconds_left=int(self.entry.get())
        self.stop_timer()
        self.countdown()
        self.start.forget()
        self.stop.forget()
        self.reset.forget()
        self.start.pack()
        self.stop.pack()
        self.reset.pack()

    def stop_timer(self):
        if self._timer_on:
            self.after_cancel(self._timer_on)
            self._timer_on=False

    def convert_seconds_left_to_time(self):
        return datetime.timedelta(seconds=self.seconds_left)



if __name__=="__main__":
    root=tk.Tk()
    root.resizable(False,False)

    countdown=Countdown(root)
    countdown.pack()

    root.mainloop()
```

OUTPUT-


IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug 1 2022, 21:53:49) [MSC v.1932 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
======= RESTART: C:/Users/acer/Desktop/Countdown Timer/COUNTDOWNTIMER1.py ======
Enter the time in seconds.
Start Timer
Stop Timer
Reset Timer
Ln: 5 Col: 0
self.label["text"]="Enter the time in seconds."


0:00:04
10
Start Timer
Stop Timer
Reset Timer