Python Minor Project
Create A Countdown Timer Using Python
Features To Include
Reset/Stop
Pause/Resume

From,

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Code:

```python
from tkinter import *
from tkinter import messagebox
import time
root = Tk()
root.title("Countdown Timer")
root.geometry("250x200")
root.configure(bg='black')

timer_on = True
hour = StringVar()
minute = StringVar()
second = StringVar()
hour.set("00")
minute.set("00")
second.set("00")
def display_entries():
    hrs_entry = Entry(root, width=5, font=("Arial",21,""), textvariable =
hour).grid(row=1, column= 0)
    mins_entry = Entry(root, width=5, font=("Arial",21,""), textvariable =
minute).grid(row=1, column= 1)
    sec_entry = Entry(root,width=5, font=("Arial",21,""), textvariable =
second).grid(row=1, column= 2)
def start_button():
    temp = int(hour.get())*3600 + int(minute.get())*60 + int(second.get())

    while timer_on:
        if timer_on == False:
            break
        if temp>-1:
            mins,secs = divmod(temp,60)
            hrs=0
            if mins>60:
                hrs, mins = divmod(mins, 60)
            hour.set("{0:2d}".format(hrs))
            minute.set("{0:2d}".format(mins))
            second.set("{0:2d}".format(secs))
            root.update()
            time.sleep(1)
            if (temp == 0):
                timeup()
            temp -=1

def reset_button():
    hour.set("00")
    minute.set("00")
    second.set("00")
def timeup():
    messagebox.showinfo("Timer", "Time's up!!!")


def on_click(key):
    if key == 'start':
        global timer_on
        timer_on = True
```

```
            start_button()
        if key == 'reset':
            timer_on = False
            temp =0
            reset_button()
            display_entries()
        if key == 'pause':
            timer_on = False


display_entries()
Start_button = Button(root, text= 'START', padx = 20, pady = 20, command =
lambda: on_click('start'), fg= "white", bg = "SkyBlue1")
Start_button.grid(row=2, column= 0)
Reset_button = Button(root, text= 'RESET', padx = 20, pady = 20, command =
lambda: on_click('reset'), fg= "white", bg = "SkyBlue1")
Reset_button.grid(row=0, column= 1)
Pause_button = Button(root, text= 'STOP', padx = 20, pady = 20, command =
lambda: on_click('pause'), fg= "white", bg = "SkyBlue1")
Pause_button.grid(row=2, column= 2)


root.mainloop()
```

Output: