

Stop Watch code:

```
# Python program to illustrate a stop watch

# using Tkinter

# importing the required libraries

import tkinter as Tkinter

from datetime import datetime

counter = 66600

running = False

def counter_label(label):

    def count():

        if running:

            global counter

            # To manage the initial delay.

            if counter==66600:

                display="Starting..."

            else:

                tt = datetime.fromtimestamp(counter)

                string = tt.strftime("%H:%M:%S")

                display=string

            counter+=1

            label['text']=display # Or label.config(text=display)
```

```
# label.after(arg1, arg2) delays by
# first argument given in milliseconds
# and then calls the function given as second argument.
# Generally like here we need to call the
# function in which it is present repeatedly.
# Delays by 1000ms=1 seconds and call count again.
label.after(1000, count)

counter += 1
```

```
# Triggering the start of the counter.
```

```
count()
```

```
# start function of the stopwatch
```

```
def Start(label):
```

```
    global running
```

```
    running=True
```

```
    counter_label(label)
```

```
    start['state']='disabled'
```

```
    stop['state']='normal'
```

```
    reset['state']='normal'
```

```
# Stop function of the stopwatch
```

```
def Stop():
```

```
    global running
```

```
    start['state']='normal'
```

```
stop['state']='disabled'
```

```
reset['state']='normal'
```

```
running = False
```

```
# Reset function of the stopwatch
```

```
def Reset(label):
```

```
    global counter
```

```
    counter=66600
```

```
# If rest is pressed after pressing stop.
```

```
if running==False:
```

```
    reset['state']='disabled'
```

```
    label['text']='Welcome!'
```

```
# If reset is pressed while the stopwatch is running.
```

```
else:
```

```
    label['text']='Starting...'
```

```
root = Tkinter.Tk()
```

```
root.title("Stopwatch")
```

```
# Fixing the window size.
```

```
root.minsize(width=250, height=70)
```

```
label = Tkinter.Label(root, text="Welcome!", fg="black", font="Verdana 30 bold")
```

```
label.pack()
```

```
f = Tkinter.Frame(root)
```

```
start = Tkinter.Button(f, text='Start', width=6, command=lambda:Start(label))
```

```
stop = Tkinter.Button(f, text='Stop',width=6,state='disabled', command=Stop)
```

```
reset = Tkinter.Button(f, text='Reset',width=6, state='disabled', command=lambda:Reset(label))
```

```
f.pack(anchor = 'center',pady=5)
```

```
start.pack(side="left")
```

```
stop.pack(side ="left")
```

```
reset.pack(side="left")
```

```
root.mainloop()
```