# **PYTHON MINI PROJECT**

## **COUNT DOWN TIMER USING PYTHON**

#### **FEATURES TO BE INCLUDED:**

- RESET/STOP
- PAUSE/RESUME

### **PROJECT DESCRIPTION:**

The project is made using Python language.

The libraries/modules used in the code are:

- Datetime module :-For the format 00:00:00(Hours, Mintutes, Seconds)
- Time module :-For the sleep() method.(this works like a pause in the code)
- **Keyboard module**: To input keys, record the keyboard activities and block the keys until a specified key is entered and simulate the keys.
- **Winsound module** :- To use the beep() method.It is called when the given time is over.

#### **CODE:**

```
import datetime
import time
import keyboard
import winsound
def countdown(h,m,s):
   t = h*3600 + m*60 + s
                                               #converting the given time into
   while t:
        timer=datetime.timedelta(seconds=t)
for date manipulations)
        print(timer, end="\r")
                                               #\r will just work as you have
shifted your cursor to the beginning of the string or line.
        time.sleep(1)
                                               #method in time module
        t-=1
```

```
if keyboard.is_pressed('P'):
                                             #method in keyboard module
            print("PAUSED AT {}".format(timer))
            keyboard.wait('space')
                                            #method in keyboard module(waits
        if keyboard.is_pressed('e'):
                                            #when a certain key is pressed
the code defined under it is executed
           print("TO 'STOP' CLICK 'S'\nTO 'RESET' CLICK 'R'")
            time.sleep(2)
            if keyboard.read key()=='s':
                                             #method in keyboard module
                print("STOPPED AT {}".format(timer))
                                             #terminates the program
                quit()
            elif keyboard.read key()=='r':
                                             #when the particular key is
                x=int(input("ENTER TIME IN HOURS: "))
                y=int(input("ENTER TIME IN MINUTES: "))
                z=int(input("ENTER TIME IN SECONDS: "))
                countdown(x,y,z)
    print("TIME UP!")
    for i in range(3):
        winsound.Beep(800,150)
                                       #method in winsound module(py
standard music module)
       winsound.Beep(800,150)
       winsound.Beep(800,400)
       time.sleep(0.5)
    keyboard.unhook_all()
                                              #method in keyboard module
    quit()
print("\t\tC L O C K T I M E R")
h=int(input("ENTER TIME IN HOURS: "))
m=int(input("ENTER TIME IN MINUTES: "))
s=int(input("ENTER TIME IN SECONDS: "))
print("TO 'PAUSE' CLICK 'P'\nTO 'RESUME' CLICK 'space'")
print("TO 'STOP' OR 'RESET' CLICK 'E'")
countdown(h,m,s)
```

#### **FEATURES INCLUDED:**

• Pause: Press 'P'

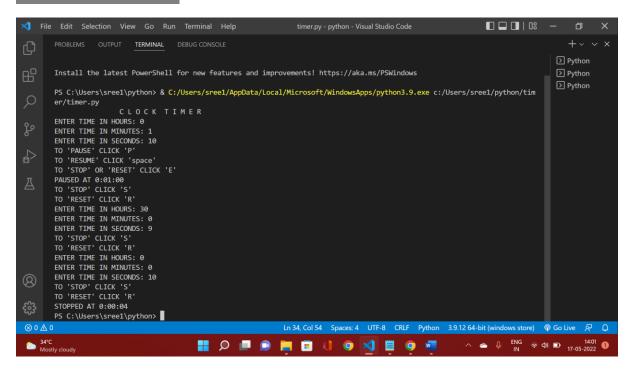
Resume: Press 'space'

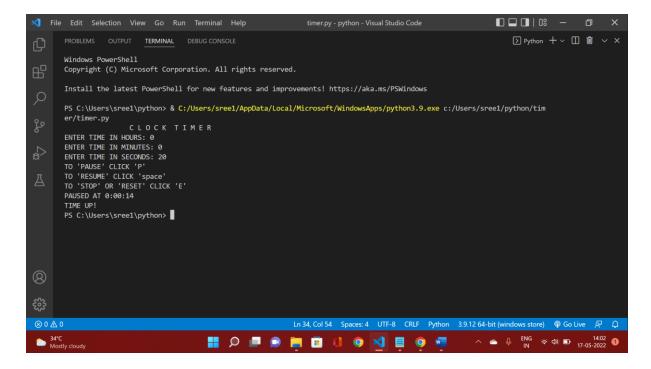
• **Stop/Reset:** Press 'E'

• **Stop:** Press 'S'

• Reset: Press 'R'

#### **SAMPLE OUTPUTS**





### NOTE:

Since the keyboard module is a little sluggish, it is adviced to press and hold the required key until the timer is paused.