

ASSIGNMENT-2

Date	19 sep 2022
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Project Name	Industry specific intelligent fire management system
Maximum Mark	2

Build a python code, Assume u get temperature and humidity values (generated with a random function to a variable) and write a condition to detect an alarm in case of high temperature continuously.

```
#
importing
the
required
modules

from tkinter import *
import datetime as dt
import time
import winsound as ws
# defining the function for the alarm clock
def alarm(setAlarmTimer):
    while True:
        time.sleep(1)
        actualTime = dt.datetime.now()
        currentTime = actualTime.strftime("%H : %M : %S")
        currentDate = actualTime.strftime("%d / %m / %Y")
        the_message = "Current Time: " + str(currentTime)
        print(the_message)
        if currentTime == setAlarmTimer:
            ws.PlaySound("sound.wav", ws.SND_ASYNC)
            break

def getAlarmTime():
    alarmSetTime = f"{hour.get()} : {minute.get()} : {second.get()}"
    alarm(alarmSetTime)

# creating the GUI for the application
```

```
guiWindow = Tk()
guiWindow.title("The Alarm Clock")
guiWindow.geometry("464x200")
guiWindow.config(bg = "#87BDD8")
guiWindow.resizable(width = False, height = False)
```

```
timeFormat = Label(
    guiWindow,
    text = "Remember to set time in 24-hour format!",
    fg = "white",
    bg = "#36486B",
    font = ("Arial", 15)
).place(
    x = 0,
    y = 160
)
```

```
add_time = Label(
    guiWindow,
    text = "Hour   Minute   Second",
    font = 60,
    fg = "white",
    bg = "#87BDD8"
).place(
    x = 220,
    y = 10
)
```

```
setAlarm = Label(
    guiWindow,
    text = "Set Time for Alarm: ",
    fg = "white",
    bg = "#034F84",
    relief = "solid",
    font = ("Helvetica", 13, "bold")
).place(
    x = 5,
    y = 50
)
```

```
hour = StringVar()
minute = StringVar()
second = StringVar()
```

```
hourTime = Entry(
    guiWindow,
```

```

textvariable = hour,
bg = "#FEFBD8",
width = 4,
font = (20)
).place(
    x = 220,
    y = 53
)
minuteTime = Entry(
    guiWindow,
    textvariable = minute,
    bg = "#FEFBD8",
    width = 4,
    font = (20)
).place(
    x = 297,
    y = 53
)
secondTime = Entry(
    guiWindow,
    textvariable = second,
    bg = "#FEFBD8",
    width = 4,
    font = (20)
).place(
    x = 390,
    y = 53
)

submit = Button(
    guiWindow,
    text = "Set The Alarm",
    fg = "white",
    bg = "#82B74B",
    width = 15,
    command = getAlarmTime,
    font = (20)
).place(
    x = 140,
    y = 100
)

guiWindow.mainloop()

```