CODE :

```python
import random
import time
thresh1=int(input("Enter the threshold value for temperature:"))
thresh2=int(input("Enter the threshold value for humidity:"))
hu=0
tp=0

while(True):
    temp=random.uniform(1,100)
    humidity=random.uniform(1,50)
    print("temperature is : {0:.2f}".format(temp))
    print("humidity is : {0:.2f} %".format(humidity))
    time.sleep(1)
    if temp>=thresh1 and humidity<=thresh2:
        tp=1
        hu=1
        print("\nHIGH ALERT\nHumidity alarm and Temperature alarm are ON \n")
        time.sleep(2)
    elif humidity<=thresh2:
        tp=0
        hu=1
        print("\nHumidity alarm is ON and Temperature alarm is OFF \n")
        time.sleep(2)
    elif temp>=thresh1:
        tp=1
        hu=0
        print("\nHumidity alarm is OFF and Temperature alarm is ON \n")
        time.sleep(2)
    else:
        tp=0
        hu=0
        print("\nBoth alarms are OFF \n")
        time.sleep(2)
```

OUTPUT :

```
Enter the threshold value for temperature:20
Enter the threshold value for humidity:12
temperature is : 18.54
humidity is : 9.60 %

Humidity alarm is ON and Temperature alarm is OFF

temperature is : 34.22
humidity is : 22.96 %

Humidity alarm is OFF and Temperature alarm is ON

temperature is : 13.89
humidity is : 23.62 %

Both alarms are OFF

temperature is : 74.84
humidity is : 37.82 %

Humidity alarm is OFF and Temperature alarm is ON

temperature is : 60.35
humidity is : 11.50 %

HIGH ALERT
Humidity alarm and Temperature alarm are ON
```