

Assignment -1
Python Programming

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| Assignment Date | 25 September 2022 |
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| Student Roll Number | 510119106701 |
| Maximum Marks | 2 Marks |

Question-1:

Build a python code, assume you get temperature and humidity values (Generated with random functions to variable) and write a condition to continuously detect alarm in case of high temperature.

Solution:

```
import random
import time
import winsound
import threading
def Temp(temp):
    if temp < 24:
        return f'Low temperature is
detected i.e: {temp}'
    elif temp > 36:
        def alarm():
            winsound.Beep(600, 700)
            winsound.Beep(600, 700)
            winsound.Beep(600, 700)
        alarms =
threading.Thread(target=alarm)
        alarms.start()
        return (f'High temperature is
detected i.e: {temp}')

    else:
        return f'Temperature is
Normal i.e: {temp}'
def Humi(humidity):
    if humidity > 41:
        return f'High humidity is
detected i.e: {humidity}'
    else:
        return f'Humidity is normal
i.e: {humidity}'
while True:
    Temperature = random.randint(10,
80)
    Humidity = random.randint(10, 60)
    temp = Temp(Temperature)
    humi = Humi(Humidity)
    print(temp)
    print(humi)
    time.sleep(5)
```

Output:

```
Low temperature is detected i.e: 16  
High humidity is detected i.e: 50  
Low temperature is detected i.e: 10  
Humidity is normal i.e: 41  
High temperature is detected i.e: 62  
Humidity is normal i.e: 33  
Low temperature is detected i.e: 20  
High humidity is detected i.e: 44  
Low temperature is detected i.e: 21  
Humidity is normal i.e: 15  
High temperature is detected i.e: 76  
High humidity is detected i.e: 50  
High temperature is detected i.e: 40  
Humidity is normal i.e: 19
```

Compiled File Link: <https://github.com/Karunanithi2211/Assignment-s.git>