

IoT Assignment 2

★Build Python code, Generate Temperature and Humidity values (Use Random function to generate values) and write a condition to detect an alarm in case of high temperature and high Humidity.

SOLUTION:

```
import machine
```

```
import time
```

```
import random
```

```
led_pin = machine.Pin(2, machine.Pin.OUT)
```

```
buzzer_pin = machine.Pin(4, machine.Pin.OUT)
```

```
temp = random.randint(0, 100)
```

```
humidity = random.randint(0, 100)
```

```
if temp > 30:
```

```
    print("High temperature detected!")
```

```
    led_pin.on()
```

```
    buzzer_pin.on()
```

```
    time.sleep(0.5)
```

```
    led_pin.off()
```

```
    buzzer_pin.off()
```

```
if humidity > 70:
```

```
    print("High humidity detected!")
```

```
    led_pin.on()
```

```
    buzzer_pin.on()
```

```
    time.sleep(0.5)
```

```
    led_pin.off()
```

```
    buzzer_pin.off()
```