

SRI ESHWAR COLLEGE OF ENGINEERING

Coimbatore

ASSIGNMENT II

TEAM MATES :

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ASSIGNMENT TOPIC :

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

CODE:

```
import serial
```

```
import time
```

```
import pytttsx3
```

```
import speech_recognition as sr
```

```
def takeCommand():
```

```
    r = sr.Recognizer()
```

```
    with sr.Microphone() as source:
```

```
print("Listening...")
r.pause_threshold = 0.5
audio = r.listen(source)
try:
    print("Recognizing... wait a minute")
    query = r.recognize_google(audio, language='en-in')
    print(f"User said: {query}\n")
except Exception as e:
    # print(e)
    print("Say that again please... icannot recognizing")
    query = "none"
return query

def speak(audio):
    engine.say(audio)
    engine.runAndWait()

engine = pyttsx3.init('sapi5')
voices=engine.getProperty('voices')
engine.setProperty("voice",voices[0].id)
engine.setProperty("rate",140)
engine.setProperty("volume",1000)

if __name__ == "__main__":
    ard = serial.Serial('com10' ,9600)
    time.sleep(2)
```

```
var = 'pt'
query=takeCommand().lower()
if 'tell me temperature' in query:
    var = 'a'
    c=var.encode()
    speak("yeah..")
    if var == 'a':
        ard.write(c)
        time.sleep(1)
        iny =(ard.readline())
        iny=iny.decode()
        iny=str(iny)
        print(iny)
        speak(str(iny)+"degree centigrade is the temperature!!")
    if var == 'b':
        ard.write(c)
```

```
Assignment 2.ino
1 import sys
2
3
4 import pytsx3
5 import speech_recognition as sr
6 def takeCommand():
7     r = sr.Recognizer()
8     with sr.Microphone() as source:
9         print("Listening...")
10        r.pause_threshold = 0.5
11        audio = r.listen(source)
12    try:
13        print("Recognizing... wait a minute")
14        query = r.recognize_google(audio, language='en-in')
15        print(f"User said: {query}\n")
16
17    except Exception as e:
18        # print(e)
19        print("Say that again please... i cannot recognizing")
20        query = "none"
21    return query
22
23
24
25 def speak(audio):
26     engine.say(audio)
27     engine.runAndWait()
28 engine = pytsx3.init('sapi5')
29 voices=engine.getProperty('voices')
30 engine.setProperty("voice",voices[0].id)
31 engine.setProperty("rate",140)
32 engine.setProperty("volume",1000)
33
34
```



```
Assignment 2.ino
25  void speak(audio).
26      engine.say(audio)
27      engine.runAndWait()
28  engine = pyttsx3.init('sapi5')
29  voices=engine.getProperty('voices')
30  engine.setProperty("voice",voices[0].id)
31  engine.setProperty("rate",140)
32  engine.setProperty("volume",1000)
33
34
35  if __name__ == "__main__":
36      ard = serial.Serial('com10',9600)
37      time.sleep(2)
38
39      var = 'pt'
40      query=takeCommand().lower()
41      if 'tell me temperature' in query:
42          var = 'a'
43          c=var.encode()
44          speak("yeah...")
45
46      if var == 'a':
47          ard.write(c)
48          time.sleep(1)
49          iny =(ard.readline())
50          iny=iny.decode()
51          iny=str(iny)
52          print(iny)
53          speak(str(iny)+"degree centigrade is the temperature!!")
54
55      if var == 'b':
56          ard.write(c)
```

Ln 44, Col 24 UTF-8 C++ No board selected