Assignment -2

Python Programming

Assignment Date	24 September 2022
Student Name	HARIHARAN A
Student Roll Number	737819ECR050
Maximum Marks	2 Marks

Question-1:

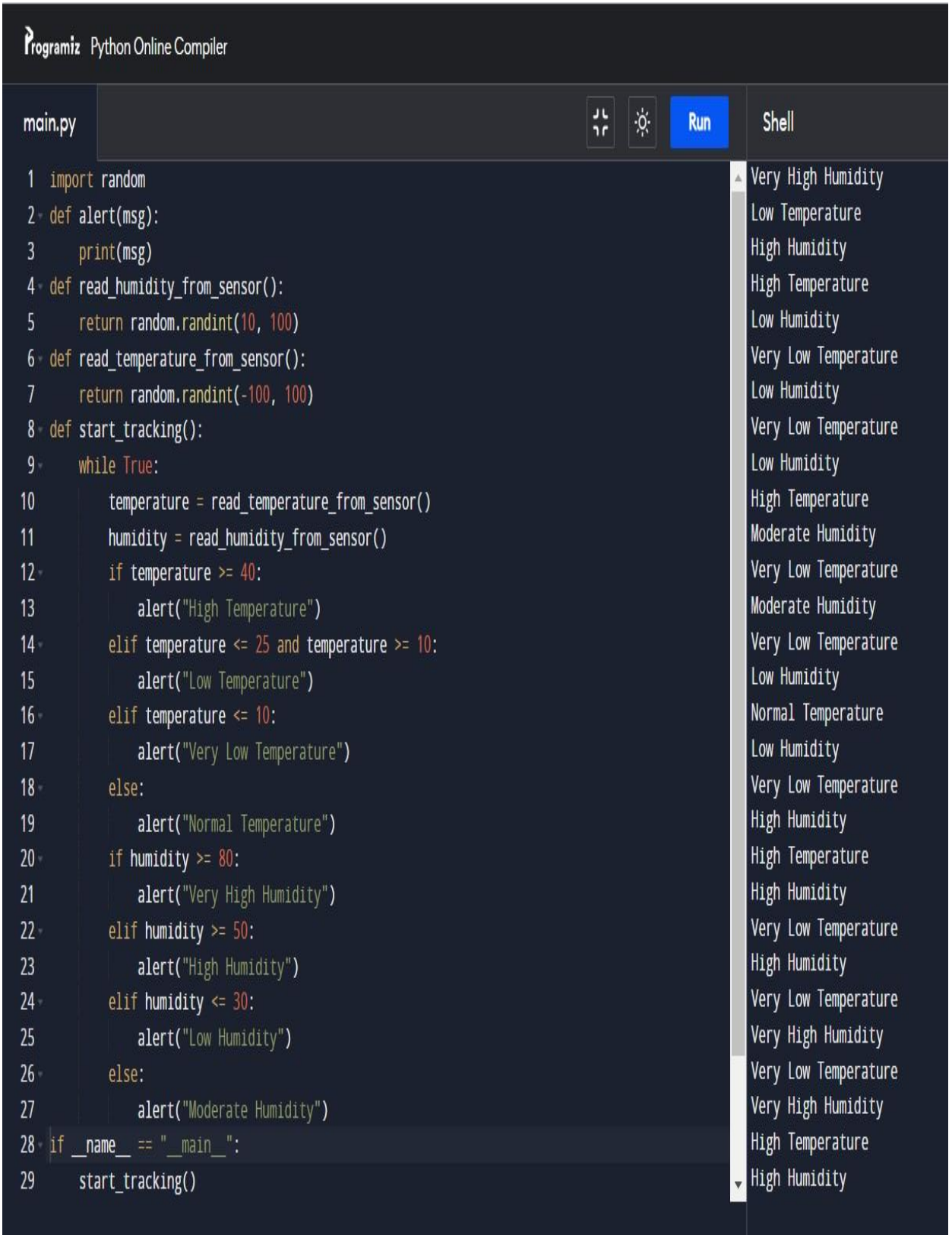
Build a python code, Assume u get temperature and humidity values(Generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

Solution:

```
Import random

def alert(msg):
      print(msg)

def read_humidity_from_sensor():
     return random.randint(10,100)

def read_temperature_from_sensor():
     return random.randint(-100,100)

def start_tracking():

   while True:
      temperature = read_temperature_from_sensor()
      humidity = read_humidity_from_sensor()
```

```
        if temperature >= 40:
            alert("High Temperature")
        elif temperature <= 25 and temperature >= 10:
            alert("Low Temperature")
        elif temperature <= 10:
            alert("Very Low Temperature")
        else:
            alert("Normal Temperature")
        if humidity >= 80:
            alert("Very High Humidity")
        elif humidity >= 50:
            alert("High Humidity")
        elif humidity <= 30:
            alert("Low Humidity")
        else:
            alert("Moderate Humidity")

if__name__== "__main__":
    start_tracking()
```

OUTPUT:


Programiz Python Online Compiler
main.py
Run
Shell
import random
def alert(msg):
print(msg)
def read_humidity_from_sensor():
return random.randint(10, 100)
def read_temperature_from_sensor():
return random.randint(-100, 100)
def start_tracking():
while True:
temperature = read_temperature_from_sensor()
humidity = read_humidity_from_sensor()
if temperature >= 40:
alert("High Temperature")
elif temperature <= 25 and temperature >= 10:
alert("Low Temperature")
elif temperature <= 10:
alert("Very Low Temperature")
else:
alert("Normal Temperature")
if humidity >= 80:
alert("Very High Humidity")
elif humidity >= 50:
alert("High Humidity")
elif humidity <= 30:
alert("Low Humidity")
else:
alert("Moderate Humidity")
if __name__ == "__main__":
start_tracking()
Very High Humidity
Low Temperature
High Humidity
High Temperature
Low Humidity
Very Low Temperature
Low Humidity
Very Low Temperature
Low Humidity
High Temperature
Moderate Humidity
Very Low Temperature
Moderate Humidity
Very Low Temperature
Low Humidity
Normal Temperature
Low Humidity
Very Low Temperature
High Humidity
High Temperature
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Very Low Temperature
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Very Low Temperature
Very High Humidity
Very Low Temperature
Very High Humidity
High Temperature
High Humidity