## **ASSIGNMENT - 2**

## **PYTHON PROGRAM:**

```
import random
temperature=random.randint(1,100)
humidity=random.randint(1,50)
print(temperature)
print(humidity)
if((temperature<50)&(humidity<30)):
  print("Temperature is normal: ")
  print("Humidity is normal: ")
  print("Alarm off")
elif((temperature<50)&(humidity>30)):
  print("Temperature is low: ")
  print("Humidity is high: ")
  print("Alarm off")
elif((temperature>50)&(humidity>30)):
  print("Temperature is high: ")
  print("Humidity is high: ")
  print("Alarm on")
elif((temperature>50)&(humidity<30)):
  print("Temperature is high: ")
  print("Humidity is low: ")
  print("Alarm on")
```

## else:

```
print("Temperature is very low: ")
print("Humidity is very low: ")
print("Alarm off")
```

## **OUTPUT:**

```
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                                                                           76 Python Shell
File Edit Format Run Options Windows Help
                                                                           File Edit Shell Debug Options Windows Help
import random
                                                                           >>>
temperature=random.randint(1,100)
                                                                           36
                                                                           61
humidity=random.randint(1,50)
print(temperature)
                                                                           temperature is high:
                                                                           humidity is high:
print (humidity)
                                                                           alarm on
if((temperature<50)&(humidity<30)):
   print("temperature is normal: ")
                                                                           >>> =
                                                                                            ====== RESTART ======
   print("humidity is normal: ")
   print("alarm off")
                                                                           69
\verb|elif((temperature<50)&(humidity>30)):\\
                                                                           temperature is high:
   print("temperature is low: ")
   print("humidity is high: ")
                                                                           humidity is high:
                                                                           alarm on
   print ("alarm off")
                                                                                          ----- RESTART -----
elif((temperature>50)&(humidity<30)):
                                                                           >>> ==
   print("temperature is high: ")
   print("humidity is high: ")
                                                                           70
   print("alarm on")
                                                                           19
elif((temperature>50)&(humidity>30)):
                                                                           temperature is high:
                                                                           humidity is high:
   print("temperature is high: ")
                                                                           alarm on
   print("humidity is low: ")
   print("alarm on")
                                                                           >>> ====
                                                                                         46
   print("temperature is very low: ")
                                                                           42
   print("humidity is very low: ")
   print("alarm off")
                                                                           temperature is low:
                                                                           humidity is high:
                                                                           alarm off
                                                                                          ----- RESTART -----
                                                                           >>> ==
                                                                           56
                                                                           temperature is high:
                                                                           humidity is low:
                                                                           alarm on
                                                                                            RESTART ----
                                                                           >>> ==
                                                                           39
                                                                           temperature is low:
                                                                           humidity is high:
                                                                           alarm off
```