## **ASSIGNMENT – 2**

## **PYTHON PROGRAM:**

```
import random
temperature=random.randint(1,100)
humidity=random.randint(1,50)
print(temperature)
print(humidity)
if((temperature<45)&(humidity<35)):
  print("Temperature is normal")
  print("Humidity is normal")
elif((temperature>45)&(humidity<35)):
  print("Temperature is high")
  print("Humidity is low")
elif((temperature<45)&(humidity>35)):
  print("Temperature is low")
  print("Humidity is high")
elif((temperature>45)&(humidity>35)):
  print("Temperature is high")
  print("Humidity is high")
else:
  print("Temperature is very low")
  print("Humidity is very low")
  print("Alarm off")
```

## **OUTPUT:**

```
- □ X 7% Python Shell
                                                                                                                       - П X
7 Assignment 2 - C:/Users/ELCOT/Desktop/IBM project/Assignment/Assignment 2
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)
                                                                 temperature is high:
print(temperature)
                                                                  humidity is high:
print (humidity)
if((temperature<50)&(humidity<30)):
  print("temperature is normal: ")
                                                                  print("humidity is normal: ")
                                                                  >>>
  print ("alarm off")
                                                                  69
elif((temperature<50)&(humidity>30)):
                                                                  temperature is high:
  print("temperature is low: ")
                                                                  humidity is high:
  print("humidity is high: ")
   print ("alarm off")
                                                                  alarm on
                                                                  elif((temperature>50)&(humidity<30)):
  print ("temperature is high: ")
                                                                  70
  print("humidity is high: ")
                                                                  19
   print ("alarm on")
                                                                  temperature is high:
elif((temperature>50)&(humidity>30)):
                                                                  humidity is high:
   print("temperature is high: ")
                                                                  alarm on
  print("humidity is low: ")
                                                                  print("alarm on")
                                                                  >>>
                                                                  46
   print("temperature is very low: ")
   print("humidity is very low: ")
   print ("alarm off")
                                                                  temperature is low:
                                                                  humidity is high:
                                                                  alarm off
                                                                  56
                                                                  32
                                                                  temperature is high:
                                                                  humidity is low:
                                                                  alarm on
                                                                  >>> =====
                                                                            ----- RESTART -----
                                                                  39
                                                                  temperature is low:
                                                                  humidity is high:
                                                                  alarm off
```