Program:

```
import random
while(temperature and humidity):
    temperature=random.randint(15,90)
    humidity=random.randint(15,90)

if (temperature>35 and humidity>55 ):
    print("High temperature and humidity of:",temperature,humidity,"Alarm is on")
    elif (temperature>35 and humidity<55):
        print("High temperature and Normal humidity of:",temperature,humidity,"Alarm is on")
    elif (temperature<35 and humidity>55):
        print("Normal temperature and High humidity of:",temperature,humidity,"Alarm is on")
    else:
        print("Normal temperature and humidity of:",temperature,humidity,"Alarm is off")
```

