```python
import datetime
import time
# I am using python because I am more proficient in the
language.
# Assuming this  is the output gotten from the Farm
management system.
# Mini farm management system with password
authentication
# By Dickson Esuku
farm_details = {
  "temperature": 70,
  "Sunlight": "Very Bright",
  "Soil": "Loamy"
}
farm_details2 = {
  "temperature": 60,
  "Sunlight": "Very Bright",
  "Soil": "Loamy",
  "Date": datetime.date.today(),
  "Moisture": 8
}
farm_user1 = {
    "name": "Sam",
    "password": "sam123"
}

def get_name(): # This function takes name  of a user
and switches to the next function
    global name  # making var name accessible to other
functions
    name = input("Enter Name: ").lower()
    if name == "sam":
        # begin the next function
        get_password()


    else:
        print("No user called {}".format(name))
        get_name()
```

```python
    return

def get_password(): # This function authenticates the
password and calls the next function if successful
    password = input("Enter Password: ").lower()
    if password == farm_user1["password"]:
        print("Authentication Successful! Please
Wait...")
        time.sleep(2)
        get_farm_details()
    else:

        cname=name.capitalize()
        print("Wrong Password for user,
{}".format(cname))
        time.sleep(0.5)
        get_password()

    return
def get_farm_details(): # This function does the
neccessary permutations and displays the requested
information the user wants
    cname = name.capitalize()
    farm_temp = farm_details["temperature"]
    farm_light = farm_details["Sunlight"]
    farm_soil = farm_details["Soil"]
    farm_avg_temp = (farm_details["temperature"] +
farm_details2["temperature"])/2
    farm = farm_details2["Date"]
    farm_moisture = farm_details2["Moisture"]
    print(cname +", the base lighting of the farm
today, {0} is ".format(farm) + str(farm_light))
    print("Moisture level is {}
bars".format(farm_moisture))
    print("The average temperature of the farm is " +
str(int(farm_avg_temp)) + "C")
    if farm_temp > 50:
        print("--------------------------------Log----
-------------------------------")
```

```python
        print("ALERT! Farm was too hot on
{}".format(farm_details2["Date"]))

    if farm_temp < 40:
        print("ALERT! Farm was too cold on
{}".format(farm_details2["Date"]))

    if farm_moisture < 40:
        print("ALERT! Soil needs/needed watering on {}.
Should I proceed?(y/n)".format(farm_details2["Date"]))
        option= input()
        if option== "y":
            print("The plants have been watered.")
            print("Should I restart the process?(y/n)")
            option = input()
            if option == "y":
                get_name()
            else:
                print("Thank you for using my
program!")
                time.sleep(2)
                exit()
        elif option=="n":
            print("Okay, should I restart the
process?(y/n)")
            option=input()
            if option=="y":
                get_name()
            else:
                print("Thank you for using my
program!")
                time.sleep(2)
                exit()


    return

get_name()
```