Algorithm:

STEP 1: START

STEP 2: Select mode

STEP 3: If Mode == Automatic

1) Read the soil moisture
2) If moisture level < minimum threshold
   Then,
   Open the required valve
3) If moisture level == minimum threshold
   Then,
    Close the valve

STEP 4: If Mode == Time Interval

1) Set the time interval
2) If Time passed != Time Interval
   Then,
   Open the required value
3) If Time passed == Time Interval
   Then,
   Close the valve

STEP 5: Mode == Manual

1) Set the choice: Yes or No
2) If choice == Yes
   Then,
   Open the valve
3) If choice == No
   Then,
   Close the valve

STEP 6: END