```
#include <LiquidCrystal.h>
#include <SoftwareSerial.h>
LiquidCrystal lcd(13, 12, 11, 10, 9, 8);
SoftwareSerial mySerial(2, 3);
#include<Servo.h>
#define servoPin 6
Servo myServo;
#define pump1 5
#define BUZ 4

String textMessage;



int memsx=0,memsy=0;

int hbtc=0,hbtc1=0,rtrl=0;
unsigned char rcv,count,gchr='x',gchr1='x',robos='s';

char rcvmsg[10],pastnumber[11];
 //char pastnumber1[11],pastnumber2[11];//pastnumber3[11];
  int ii=0,rchkr=0;

float tempc=0,weight=0;
float vout=0;



int sti=0;
```

```
String inputString = "";         // a string to hold incoming data
boolean stringComplete = false;  // whether the string is complete

void okcheck()
{
  unsigned char rcr;
  do{
      rcr = mySerial.read();
    }while(rcr != 'K');
}

void setup()
{
    myServo.write(0);
   pinMode(BUZ, OUTPUT);
   digitalWrite(BUZ,LOW);
   pinMode(pump1, OUTPUT);
   digitalWrite(pump1,HIGH);
  lcd.setCursor(0,0);
  lcd.print("  WELCOME  ");
  delay(1000);
  Serial.println("Initializing...");
  gsminit();
serialEvent();

}
```

```
char memss='x';

void loop()
{
int SW1 = digitalRead(A0); // read new state
int ldr1 = digitalRead(A4);
int ldr2 = digitalRead(A5);



if(ldr1==HIGH&&ldr2==LOW&&SW1==LOW)
{
       lcd.clear();
     lcd.print("LDR1 ON");
     delay(2000);
     digitalWrite(BUZ,LOW);
     digitalWrite(pump1,HIGH);
      myServo.write(90);
}

if(ldr1==LOW&&ldr2==HIGH&&SW1==LOW)
{
        lcd.clear();
     lcd.print("LDR2 ON");
     delay(2000);
     digitalWrite(BUZ,LOW);
     digitalWrite(pump1,HIGH);
        myServo.write(0);
```

```
}
if(ldr1==LOW&&ldr2==LOW&&SW1==LOW)
{
        lcd.clear();
    lcd.print("NORMAL");
    delay(1000);
    digitalWrite(BUZ,LOW);
    digitalWrite(pump1,HIGH);
}

if(ldr1==HIGH&&ldr2==HIGH&&SW1==LOW)
{
        lcd.clear();
    lcd.print("NORMAL");
    delay(1000);
    digitalWrite(BUZ,LOW);
    digitalWrite(pump1,HIGH);
}

if(SW1==HIGH)
  {
      lcd.clear();
    lcd.print("SOIL DRY");
    delay(1000);
    lcd.setCursor(0, 1);
    lcd.print("PUMP ON");
```

```
      delay(1000);
      digitalWrite(pump1,LOW);
      digitalWrite(BUZ,HIGH);
        delay(1500);
      digitalWrite(BUZ,LOW);
    mySerial.write("ATD");
   mySerial.write(pastnumber);
    mySerial.write(";\r\n");
    delay(4000);
    mySerial.write("AT+CMGS=\"");
    mySerial.write(pastnumber);
    mySerial.write("\"\r\n");  delay(3000);
    mySerial.write(" SOIL DRY PUMP ON");
    mySerial.write(0x1A);delay(4000);delay(4000);
    lcd.clear();
  }
if(mySerial.available()>0)
     {
    textMessage = mySerial.readString();
    Serial.print(textMessage);
    delay(10);
  }
}
void serialEvent()
{
  while (mySerial.available())
       {
```

```
        char inChar = (char)mySerial.read();
          //sti++;
          //inputString += inChar;
         if(inChar == '*')
           {sti=1;
             inputString += inChar;
            //  stringComplete = true;
            // gchr = inputString[sti-1]
           }
         if(sti == 1)
           {
              inputString += inChar;
           }
         if(inChar == '#')
           {sti=0;
             stringComplete = true;
           }
       }
}
int readSerial(char result[])
{
  int i = 0;
  while (1)
  {
    while (mySerial.available() > 0)
    {
```

```
      char inChar = mySerial.read();
      if (inChar == '\n')
         {
          result[i] = '\0';
          mySerial.flush();
          return 0;
         }
      if (inChar != '\r')
         {
          result[i] = inChar;
          i++;
         }
    }
  }
}

int readSerial1(char result[])
{
  int i = 0;
  while (1)
  {
    while (mySerial.available() > 0)
    {
      char inChar = mySerial.read();
      if (inChar == '*')
         {
          result[i] = '\0';
```

```
          mySerial.flush();
          return 0;
         }
      if (inChar != '*')
         {
          result[i] = inChar;
          i++;
         }
    }
  }
}
void gsminit()
{
    Serial.print("SEND MSG STORE");
  Serial.print("MOBILE NUMBER");
      lcd.clear();
      lcd.print("SEND MSG STORE");
      lcd.setCursor(0, 1);
      lcd.print("MOBILE NUMBER");
  do{
     rcv = mySerial.read();
    }while(rcv != '*');
     readSerial(pastnumber);
     pastnumber[10]='\0';
  Serial.print(pastnumber);
    lcd.clear();
     lcd.print(pastnumber);
```

```
    delay(1000);
   mySerial.write("AT+CMGS=\"");
   mySerial.write(pastnumber);
   mySerial.write("\"\r\n"); delay(3000);
   mySerial.write("Mobile no. registered\r\n");
   mySerial.write(0x1A);
   delay(4000);delay(5000);
  //delay(1000);
}
```