

## LAMPIRAN

```
//Setup for AC Control
```

```
bool evapb = false, condb = false, comp1b = false, comp2b = false;
```

```
Inisiasi Pin pada Relay
```

```
int S1=15;
```

```
int S2=5;
```

```
int S3=18;
```

```
int S4=19;
```

```
int BZ=12;
```

```
Inisiasi Pin pada ESP32
```

```
void setup() {
```

```
  Serial.begin(115200);
```

```
  WIFI();
```

```
  aDHT.begin();
```

```
  pinMode(S1, OUTPUT);
```

```
  pinMode(S2, OUTPUT);
```

```
  pinMode(S3, OUTPUT);
```

```
  pinMode(S4, OUTPUT);
```

```
  pinMode(BZ, OUTPUT);
```

```
  digitalWrite(S1,HIGH);
```

```
  digitalWrite(S2,HIGH);
```

```
  digitalWrite(S3,HIGH);
```

```
  digitalWrite(S4,HIGH);
```

```
  digitalWrite(BZ,LOW);
```

```
Pembacaan dan pengambilan data dari sensor
```

```
void get_value(){
```

```
  tempb = aDHT.readTemperature();
```

```
  humib = aDHT.readHumidity();
```

```
  if (isnan(tempb) || isnan(humib)){
```

```
    Serial.println("Failed Read Sensor!!!");
```

```
  }
```

```
  else{
```

```
Serial.print(tempb);  
Serial.print(" ");  
Serial.println(humib);
```

Kondisi parameter suhu  $\geq 27$  (Evaporator ON, Condensor ON,  
Compresor 1 dan Compresor 2 ON)

```
void AC_control(){  
  if (tempb  $\geq 27.0$ ){  
    evapb = true, condb = true, comp1b = true, comp2b = true;  
    digitalWrite(S1,LOW);  
    digitalWrite(S2,LOW);  
    digitalWrite(S3,LOW);  
    digitalWrite(S4,LOW);  
    digitalWrite(BZ,LOW);
```

Kondisi parameter apabila kondisi  $27^{\circ}\text{C} \geq \text{Suhu} \geq 23^{\circ}\text{C}$  (Buzzer  
berbunyi apabila salah satu/dua HIGH)

```
  else if(tempb  $\geq 23.0$  && tempb  $< 27.0$ ){  
    evapb = true, condb = true, comp1b = false, comp2b = false;  
    digitalWrite(S1,HIGH);  
    digitalWrite(S2,HIGH);  
    digitalWrite(S3,LOW);  
    digitalWrite(S4,LOW);  
    Buzzer();
```

Kondisi parameter Suhu  $\leq 20^{\circ}\text{C}$

```
  evapb = true, condb = false, comp1b = false, comp2b = false;  
    digitalWrite(S1,HIGH);  
    digitalWrite(S2,HIGH);  
    digitalWrite(S3,LOW);  
    digitalWrite(S4,HIGH);  
    Buzzer();
```

Kontrol tombol ON dan OFF pada alat

```
//Kontrol On Off alat
```

```
if (Switch0=="1"){  
    AC_control();  
}  
else{  
    evapb = false, condb = false, comp1b = false, comp2b = false;  
    digitalWrite(S1,HIGH);  
    digitalWrite(S2,HIGH);  
    digitalWrite(S3,HIGH);  
    digitalWrite(S4,HIGH);
```

