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<div style="text-align: center;"><span style="font-size: medium;"><b>M2 (TP1) percobaan 2 kondisi 5</b></span></div><div style="text-align: center;"><span style="font-size: medium;"><b><br /></b></span></div><div style="text-align: center;">
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<a href="https://pretty203014.blogspot.com/p/modul-1-general-input-dan-output.html">[KEMBALI KE MENU SEBELUMNYA]</a></div>
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<span style="font-family: arial; font-size: medium;"><br />
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</span><center>
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<div style="background-color: white; border: 2px dashed rgb(23, 128, 221); height: 240px; overflow: auto; padding: 10px; text-align: center; width: 330px;">
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<span style="font-family: arial; font-size: medium;"><b>DAFTAR ISI</b>
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<br />
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<a name="1">
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</a></span><div style="text-align: left;"><span style="font-family: arial; font-size: medium;"><a name="1">
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</a><a href="#2">1. Kondisi</a></span></div>
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</a><a href="#4">2. Gambar Rangkaian Simulasi</a></span></div>
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</span></a><div style="text-align: left;"><span style="font-family: arial; font-size: medium;"><a name="5">
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</a><a href="#6">3. Video Simulasi</a></span></div>
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</span></a><div style="text-align: left;"><span style="font-family: arial; font-size: medium;"><a name="7">
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</a><a href="#8">4. Prinsip Kerja</a><br />
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<a name="9">
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</a></span><div style="text-align: left;"><span style="font-family: arial; font-size: medium;"><a name="9">
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</a><a href="#10">5. Link Download</a></span></div>
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<a name="11"><span style="font-family: arial; font-size: medium;">
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</span></a><div style="text-align: left;"><span style="font-size: medium;"><br /></span></div>
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</div>
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5

4. Prinsip Kerja Rangkaian

Percobaan 2 kondisi

Pada rangkaian percobaan 2 kondisi 5 yang mana ketentuan yang diberikan bila suhu yang terbaca pada LCD menunjukkan suhu > 30 derajat celcius maka buzzer akan berbunyi. Komponen yang ada pada rangkaian ini adalah Arduino uno, LM35, LCD, Resistor, transistor, dan buzzer. Pin arduino yang terhubung ke LCD yaitu 2,3,4,5,6,7 dan yang terhubung ke LM 35 A0 sebagai inputan, lalu untuk pin 9 terhubung ke resistor lalu ke transistor dan outputan berupa buzzer. Untuk void loop atau perulangan LM35 membaca nilai adc sensor, lalu mencari nilai suhu, dan mengirimkan data ke serial komputer, lalu menampilkan data suhu, dan karakter derajat, yang mana diberi delay 0,1 detik

delay(100);

dimana disini diberi kondisi jika suhu > 30 derajat maka buzzer berlogika 1 atau buzzer akan berbunyi (aktif high) dan jika suhu < 30 derajat maka buzzer mati atau logika 0 (aktif low)

listing program

Arial, Tahoma, Helvetica, FreeSans, sans-serif

Josefin Sans

Times New Roman

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style="color: #434f54;">())</span></div><div><span style="color:
#434f54;">{</span></div><div><span style="color: #d35400;">pinMode</span><span style="color:
#434f54;">(</span><span style="color: #005c5f;">9</span></span>,OUTPUT<span style="color:
#434f54;">)</span></div><div><span style="color: #d35400;">pinMode</span><span style="color:
#434f54;">(</span>A0,INPUT<span style="color: #434f54;">)</span></div><br /><div><span
style="color: #434f54;">}</span></div><br /><div><span style="color: #00979d;">void</span>
<span style="color: #d35400;">loop</span><span style="color:
#434f54;">(</span></div><div><span style="color: #434f54;">{</span></div><div><span
style="color: #95a5a6;">{//suhuC = analogRead(LM35); //membaca nilai adc
sensor</span></div><div>suhuC = <span style="color: #d35400;">analogRead</span><span
style="color: #434f54;">(</span>LM35<span style="color: #434f54;">)</span> /<span style="color:
#005c5f;">2.04</span></span><span style="color: #95a5a6;"> //Mencari nilai
Suhu</span></div><div><span style="color: #95a5a6;">{//Serial.print((byte)suhuC); //mengirimkan
data ke serial komputer</span></div><div><span style="color: #d35400;">lcd</span>.<span
style="color: #d35400;">begin</span><span style="color: #434f54;">(</span><span style="color:
#005c5f;">16</span>, <span style="color: #005c5f;">2</span><span style="color:
#434f54;">)</span></div><div><span style="color: #d35400;">lcd</span>.<span style="color:
#d35400;">setCursor</span><span style="color: #434f54;">(</span><span style="color:
#005c5f;">0</span>, <span style="color: #005c5f;">0</span><span style="color:
#434f54;">)</span></div><div><span style="color: #d35400;">lcd</span>.<span style="color:
#d35400;">print</span><span style="color: #434f54;">(</span><span style="color: #005c5f;">"Suhu
saat ini: "</span><span style="color: #434f54;">)</span></div><div><span style="color:
#d35400;">lcd</span>.<span style="color: #d35400;">setCursor</span><span style="color:
#434f54;">(</span><span style="color: #005c5f;">1</span>, <span style="color:
#005c5f;">1</span><span style="color: #434f54;">)</span></div><div><span style="color:
#d35400;">lcd</span>.<span style="color: #d35400;">print</span><span style="color:
#434f54;">(</span><span style="color: #005c5f;">"Celcius "</span><span style="color:
#434f54;">)</span></div><div><span style="color: #95a5a6;">{//lcd.setCursor(10,
1);</span></div><div><span style="color: #d35400;">lcd</span>.<span style="color:
#d35400;">print</span><span style="color: #434f54;">(</span>suhuC<span style="color:
#434f54;">)</span><span style="color: #95a5a6;"> //menampilkan data
suhu</span></div><div><span style="color: #95a5a6;">{//lcd.print("\xdf"); //menampilkan karakter
derajat</span></div><div><span style="color: #d35400;">lcd</span>.<span style="color:
#d35400;">print</span><span style="color: #434f54;">(</span><span style="color:
#005c5f;">"C"</span><span style="color: #434f54;">)</span></div><div><span style="color:
#d35400;">delay</span><span style="color: #434f54;">(</span><span style="color:
#005c5f;">100</span><span style="color: #434f54;">)</span><span style="color: #95a5a6;">
//waktu tunggu 0,1 detik</span></div><br /><div><span style="color: #728e00;">if</span><span
style="color: #434f54;">(</span>suhuC<span style="color: #005c5f;">>30</span><span
style="color: #434f54;">)</span><span style="color: #95a5a6;"> // kondisi jika suhu
>30</span></div><div>&nbsp; <span style="color: #434f54;">{</span></div><div>&nbsp; &nbsp; <span
style="color: #d35400;">digitalWrite</span><span style="color:
#434f54;">(</span>Buzzer,HIGH<span style="color: #434f54;">)</span><span style="color:
#95a5a6;">{// maka buzzer diberi logika 1 sehingga Buzzer berbunyi(aktif
HIGH)</span></div><div>&nbsp; <span style="color: #434f54;">}</span></div><div>&nbsp; <span
style="color: #728e00;">else</span><span style="color: #95a5a6;"> // kondisi jika suhu
>30</span></div><div>&nbsp; <span style="color: #434f54;">{</span></div><div>&nbsp; &nbsp; <span
style="color: #d35400;">digitalWrite</span><span style="color:

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#434f54;">(Buzzer,LOW); // maka buzzer diberi logika 0 sehingga Buzzer mati (aktif LOW)</div><div> }</div><div>}</div></div><div>
</div><div style="text-align: justify;">
</div><div>5. Link Download[Back]</div><p> </p><p>Link Download HTML [disini]</p><p>Link Download Rangkaian [disini]</p><p>Link Download Video [disini]</p><p>Link Download Datasheet Resistor [disini]</p><p>Link Download Datasheet Transistor [disini]</p><p>Link Download Datasheet LCD [disini]</p><p>Link Download Datasheet LM35 [disini]</p><p></p><p>Link Download Datasheet Arduino Uno [disini]</p><p>Link Download Library Arduino Uno [disini]</p><div>
<div style="text-align: center;">
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