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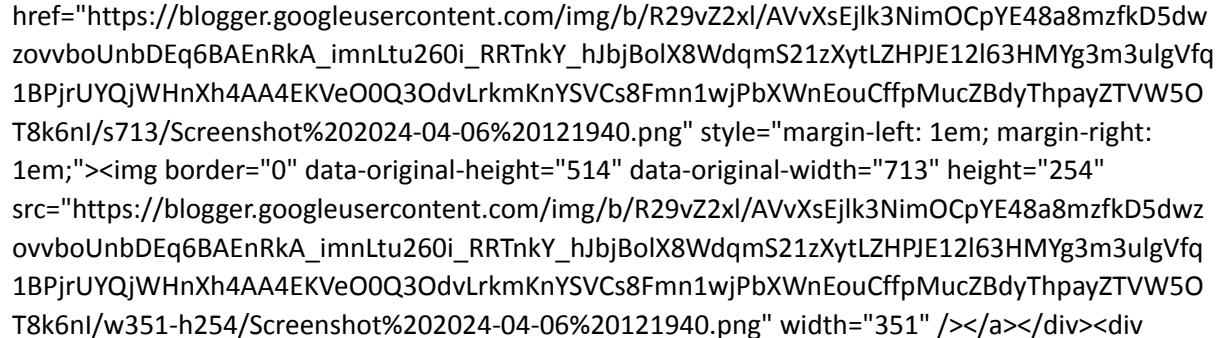
6.

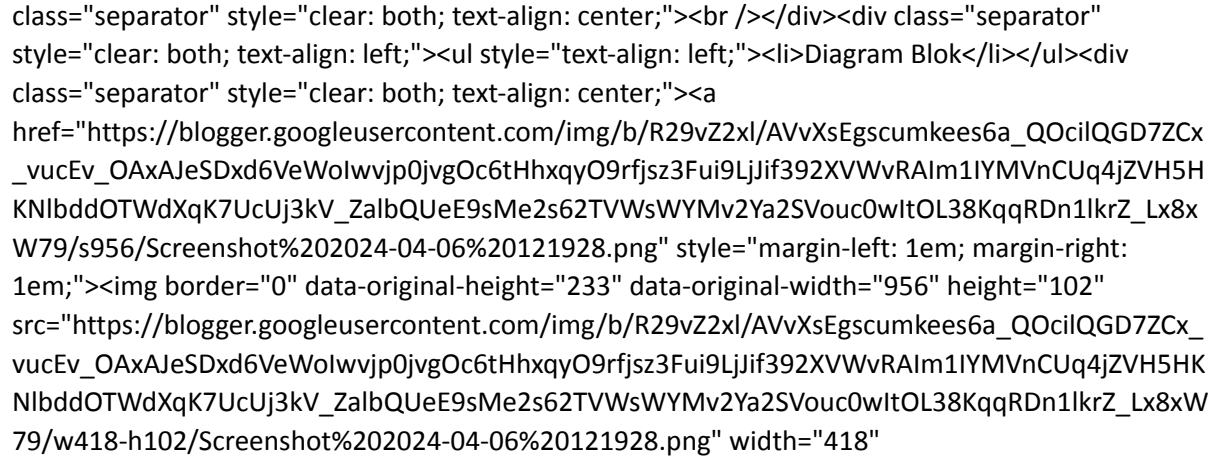
Selesai

2. Hardware dan Diagram Blok

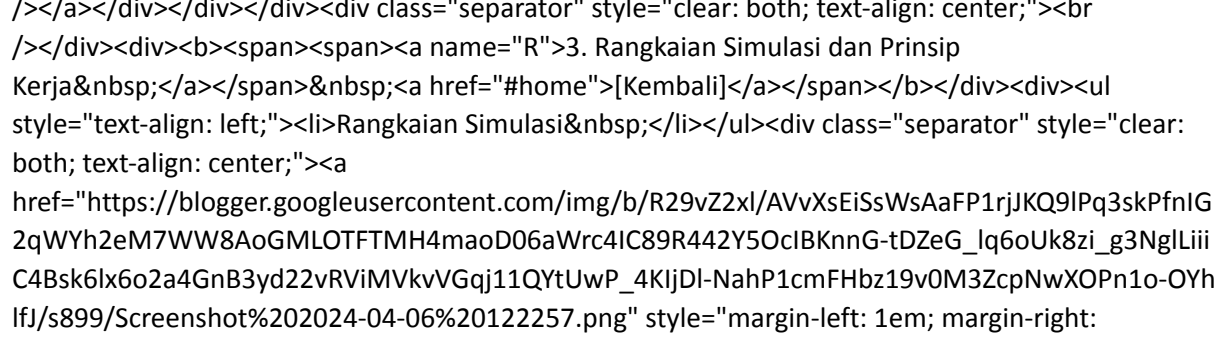
[\[Kembali\]](#home)

- Hardware





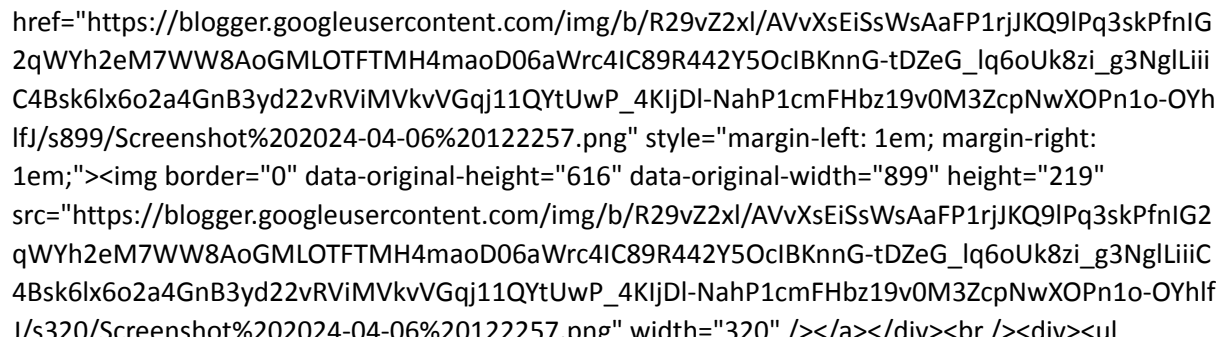
- Diagram Blok



3. Rangkaian Simulasi dan Prinsip Kerja

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- Rangkaian Simulasi



- Prinsip Kerja

Pada percobaan 1 kondisi 1 ini kita menggunakan komunikasi data UART yang mana mengirimkan data secara serial tanpa mengikuti clock menggunakan pin Rx dan pin Tx. disini kita menggunakan dipswitch pull down (maksud nya switchnya aktif ketika logika nya 1) sebagai input dari master pada arduino. dan slave (penerima) arduino yang mana nantinya output dapat dilihat pada hidup atau tidak led nya. Ketika 1 dipswitch

dihidupkan maka 1 led hidup sedangkan 4 dipswitch dihidupkan maka 3 led akan hidup.

4. Flowchart dan Listing Program

[Kembali]

- Flowchart

Master

Slave

Listing Program

```

//MASTER

#define DS1 2

#define DS2 3

#define DS3 4

#define DS4 5

#define DS5 6

#define DS6 7

#define DS7 8

#define DS8 9

void setup()
{
  Serial.begin(9600);

```

```

pinMode(DS1, INPUT);
pinMode(DS2, INPUT);
pinMode(DS3, INPUT);
pinMode(DS4, INPUT);
pinMode(DS5, INPUT);
pinMode(DS6, INPUT);
pinMode(DS7, INPUT);
pinMode(DS8, INPUT);
}

void loop()
{
  int count = 0;
  for (int pin = DS1; pin &lt;= DS8; pin++) {
    count += digitalRead(pin);
  }
  if (count == 1)
  {
    Serial.write('A');
  }
  else if (count == 4)
  {
    Serial.write('B');
  }
  delay(20);
}
</span></pre><div><pre><span style="background-color: white;">//SLAVE
int led[] = {2, 3, 4, 5, 6, 7, 8, 9};
char message;
void setup()
{
  Serial.begin(9600);

```

```
for (int i = 0; i < 8; i++)
{
  pinMode(led[i], OUTPUT);
}

void loop()
{
  if (Serial.available())
  {
    message = Serial.read();
    if (message == 'A')
    {
      digitalWrite(led[0], 1);
    }
    else if (message == 'B')
    {
      digitalWrite(led[2], 1);
      digitalWrite(led[5], 1);
      digitalWrite(led[7], 1);
    }
  }
  delay(20);
  digitalWrite(led[0], 0);
  digitalWrite(led[1], 0);
  digitalWrite(led[2], 0);
  digitalWrite(led[3], 0);
  digitalWrite(led[4], 0);
  digitalWrite(led[5], 0);
  digitalWrite(led[6], 0);
  digitalWrite(led[7], 0);
}
```

```

} </span></pre></div></pre></div></div></div><div><b style="text-align: left;"><br
/></b></div><div><span style="text-align: left;"><div><b><span><span><a name="VD">5. Video
Demo</a></span>&nbsp;<a href="#home">[Kembali]</a></span></b></div><div class="separator"
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justify;"><b style="text-align: left;"><span><span><a name="K">6. Kondisi</a></span>&nbsp;<a
href="#home">[Kembali]</a></span></b></p><p style="text-align: justify;"><span
style="background-color: white; text-align: left;">Percobaan 1 (</span><span
style="background-color: white; text-align: left;">Komunikasi UART Menggunakan Arduino - sesuai
rangkaian modul)&nbsp;</span><span style="color: white; font-family: times, &quot;times new
roman&quot;, serif; font-size: 13.2px; text-align: left;">ercoba</span><span style="color: white;
font-family: times, &quot;times new roman&quot;, serif; font-size: 13.2px; text-align:
left;">an&nbsp;</span></p><div style="text-align: justify;"><b style="text-align:
left;"><span><span><a name="L">7. Download File&nbsp;</a></span><a
href="#home">[Kembali]</a></span></b></div><div style="text-align: -webkit-center;"><span
style="text-align: left;"><span><span><b style="text-align: left;"><div style="font-weight: 400;
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justify;"><b><span style="font-weight: 400;">HTML&nbsp;</span><a
href="https://drive.google.com/uc?export=download&amp;id=1o0KOapdfGaUkVWE4R2BWdXE9he-
_WxZ" style="font-weight: 400;">klik disini</a></b></p><p style="text-align:
justify;"><span>Gambar Hardware&nbsp;</span><span>&nbsp;</span></span><a
href="https://drive.google.com/file/d/1jkJDoITBshvvZVdn-sewiZqX52a13zLm/view?usp=drive_link">
klik disini</a></p><p style="text-align: justify;"><span>Gambar
Simulasi&nbsp;</span><span>&nbsp;</span><a
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klik disini</a></p><p style="text-align: justify;"><span>Video
Demo&nbsp;</span><span>&nbsp;</span><a
href="https://drive.google.com/uc?export=download&amp;id=1ByAffixHNGmMU73sYTtqyHrKvxLK3
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disini</a></p></span></span></span></div></b></span></span></span></div></span></span></div>
<div style="text-align: left;"><span style="font-family: times;"><span
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justify;">&nbsp;</span><a
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