

```
<a name="home">
</a>
<br />
<div style="text-align: center;">
<a
href="https://rizkyar212015.blogspot.com/2024/02/modul-1-praktikum-up-dan-uc.html">[KEMBA
LI KE MENU SEBELUMNYA]</a></div>
<br />
<center>
<div style="background-color: white; border: 2px dashed rgb(23, 128, 221); height: 240px;
overflow: auto; padding: 10px; text-align: center; width: 330px;">
<b>DAFTAR ISI</b>
<br />
<div style="text-align: left;">
<a href="#Prosedur">1. Prosedur</a></div>
<div style="text-align: left;">
<a href="#Hardware">2. Hardware dan Diagram Blok</a></div>
<div style="text-align: left;">
<a href="#Rangkaian">3. Rangkaian Simulasi dan Prinsip Kerja</a></div>
<div style="text-align: left;">
<a href="#Flowchart">4. Flowchart dan Listing Program</a></div>
<div style="text-align: left;">
<a href="#Demo">5. Kondisi</a></div>
<div style="text-align: left;">
<a href="#Kondisi">6. Video Demo</a></div>
<div style="text-align: left;">
<a href="#Download">7. Download File</a><br />
</div>
</div>
</center>
<span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><span
style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif; font-size:
small;"><b><div><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; ,
serif;"><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;
font-size: small;"><b><br /></b></span></span></div><div style="text-align:
center;">PERCOBAAN 1</div><div style="text-align: center;">LED &amp;
SWITCH</div><div><span style="font-family: &quot;times&quot; , &quot;times new
roman&quot; , serif;"><span style="font-family: &quot;times&quot; , &quot;times new
roman&quot; , serif; font-size: small;"><b><br /></b></span></span></div>1. Prosedur </b>
<a name="Prosedur"></a>
<a href="#home">[Kembali]</a></span></span><div><span style="font-family: times, times new
roman, serif;"><br /></span><div><div><div><span style="background-color: white;"><span
style="font-family: inherit;">&nbsp;1.&nbsp;&nbsp;Rangkai komponen sesuai percobaan dan kondisi
yang dipilih.</span></span></div><p class="MsoNormal"><span style="background-color:
```

white;"><span style="font-family: inherit;"><o:p></o:p></span></span></p><p class="MsoNormal"><span style="background-color: white;"><span style="font-family: inherit;">2. Buat program menggunakan Arduino IDE.<o:p></o:p></span></span></p><p class="MsoNormal"><span style="background-color: white;"><span style="font-family: inherit;">3. Compile program yang telah dibuat lalu Upload ke dalam Arduino Uno.<o:p></o:p></span></span></p><p class="MsoNormal"><span style="background-color: white;"><span style="font-family: inherit;">4. Uji coba program pada rangkaian percobaan sesuai dengan kondisi yang diinginkan.<o:p></o:p></span></span></p><p class="MsoNormal"><span style="background-color: white;"><span style="font-family: inherit;">5. Selesai</span></span></p></div><div>

<span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif; font-size: small;"><b>2. Hardware dan Diagram Blok </b>

<a name="Hardware"></a>

<a href="#home">[Kembali]</a></span></span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><span style="font-family: times, times new roman, serif;">Hardware :</span></div><div><br /></div><div><span style="font-family: times, times new roman, serif;">1.Arduino Uno</span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><span style="font-family: times, times new roman, serif;"><div class="separator" style="clear: both; text-align: center;"><a

href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEhZ6qwDtfI3-GVt\_K4r3AP3m7gdBpGGnN6s94rkZN5UZjCzrNW0CSi5fq0XhAeZyeUDwHK4TGx21vyK-yr\_h9\_wNO2fLaz70IXDLxr0bEZJqPikZBv-\_DQdWzHuEVYSsekZkjXW2drPilsKf01WwAN6dn6G2uf9BaqFzyMk7Bta vYEhZlaAesfGbUUF4Sc/s320/arudino.png" style="margin-left: 1em; margin-right: 1em;"></a></div><br /><div class="separator" style="clear: both; text-align: center;"><br /></div><br /></span></div><div>2.Push Button</div><div><br /></div><div><br /></div><div class="separator" style="clear: both; text-align: center;"><a

href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEjyjGwD08FpdiB-GVvhHuyPzxpQ\_DsnPK2dPKWlqa8BLCwcz3kNji97ug-q9yP-uMZguGbaj71jZwPrE35navBx-5nb85uBF8jb0l4d6pLITKMHJoUAWKjdcFugoJbmgMZ513rS9JYqHxDPUhxt5aKrBwW92e51k1u6zlmJ8nrmx61gB0svLRYn03hr48o/s1000/61HSIEOd0fL.\_AC\_UF1000,1000\_QL80\_.jpg" style="margin-left: 1em; margin-right: 1em;"></a></div><div><br /></div><div>3.LED</div><div><br /></div><div class="separator"

[</a></div><div class="separator" style="clear: both; text-align: center;"><br /></div>&nbsp;Blok Diagram :<br /></div><div class="separator" style="clear: both; text-align: center;"><div class="separator" style="clear: both; text-align: center;"><div class="separator" style="clear: both; text-align: center;">](https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEgBtO7wNvNlen3SojDD9_Xeh1ONeyclr6ko_hUBPNbtim2TdowfKhdR0buiar1AejurFpqcd0wwAgK9O-eNQUXkiTVQv_zmc09uKk0WVv8A2EaGJpGhvh7bALA8dU-Usa7FT2SqtJjgLrLnp-U9_SqPNkw5gELRihIW7PMKa2Qt11glj7h_iEhYLZ4zeM/s1500/LED.jpg)

[</a></div></div><br /></div><div><br /></div><div><br /></div><div>](https://blogger.googleusercontent.com/img/a/AVvXsEhWee5KP0CIQT2wbrzubKO6KqcGfiPQXWtmfnGpS-VQV1Jlcdm27-jL5j4jcmPg9hkT1A3eN9ZlcJCnY1YiSEO9dXvEYhkFvKXprEhYzqc33EDfyQ6Pst50AHKNGD0eAHpNmvmMWXFfFqs62q7uvpQhLF1mWgIYSc0r91X7GJzFCZ1VGk7rmfVar1HCZRdQ)

</span></span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><span style="font-family: times, times new roman, serif;">Rangkaian Simulasi :</span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><div class="separator" style="clear: both; text-align: center;"><br /></div><br /><span style="font-family: times, times new roman, serif;"><br /></span></div><div class="separator" style="clear: both; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEgqqBgM64CsYIsbUhchMMHB2mgbijO1COuhFx\_PjZfUoZG-F9o44oXWsGZpl5pqFqH4omw18N5eZgFmFwDX856WyyRoay8qXqn1QBLoGm40k9Xh0NdXhKRQRICpkhqvLwwlzKFWYamy\_zbhaexgqzet-Eq\_6gsSSjQSGkXoTrkKVd0QqJjq86vfeU5xfZ4/s4080/20240319\_135111.jpg" style="margin-left: 1em; margin-right: 1em;"></a></div><br />

<a name="Rangkaian"></a>

<a href="#home">[Kembali]</a></span></span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><span style="font-family: times, times new roman, serif;">Rangkaian Simulasi :</span></div><div><span style="font-family: times, times new roman, serif;"><br /></span></div><div><div class="separator" style="clear: both; text-align: center;"><br /></div><br /><span style="font-family: times, times new roman, serif;"><br /></span></div><div class="separator" style="clear: both; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEgqqBgM64CsYIsbUhchMMHB2mgbijO1COuhFx\_PjZfUoZG-F9o44oXWsGZpl5pqFqH4omw18N5eZgFmFwDX856WyyRoay8qXqn1QBLoGm40k9Xh0NdXhKRQRICpkhqvLwwlzKFWYamy\_zbhaexgqzet-Eq\_6gsSSjQSGkXoTrkKVd0QqJjq86vfeU5xfZ4/s4080/20240319\_135111.jpg" style="margin-left: 1em; margin-right: 1em;"></a></div><br />

**Prinsip Kerja**

Pada rangkaian percobaan digunakan beberapa komponen, yaitu button yang berfungsi sebagai input dan dihubungkan dengan pin A0- A5, 12 dan 13 arduino uno. selain itu juga terdapat arduino uno sebagai controller, dan LED yang digunakan sebagai output dan dihubungkan dengan pin 2- 9 arduino uno. Button dihubungkan ke VCC dan ground, yang mana ketika button ditekan, maka arus dari VCC akan mengalir dan memberikan logika high pada pin arduino uno yang berhubungan dengan button tersebut. Kemudian dengan menggunakan program pada arduino, maka LED yang berhubungan dengan button yang ditekan akan aktif. Sebagai contoh, ketika button 1 ditekan, maka akan memberikan logika high pada pin A0 sehingga menyebabkan LED 1 aktif. Hubungan antara LED 1 dan button 1 dapat terlihat pada listing program arduino, begitu juga dengan button dan LED lainnya.

**4. Flowchart dan Listing Program**

[Flowchart](#)

[\[Kembali\]](#)

Flowchart



The image shows a screenshot of a flowchart diagram. The flowchart is not clearly visible due to the low resolution and blurriness of the image. It appears to be a standard flowchart with rectangular boxes and connecting lines, but the specific details of the logic are illegible.

```
int led[] = {2, 3, 4, 5, 6, 7, 8, 9};
#define PB1 A0
#define PB2 A1
#define PB3 A2
#define PB4 A3
#define PB5 A4
#define PB6 A5
#define PB7 12
#define PB8 13
void setup()
{
  Serial.begin(9600);
  pinMode(PB1, INPUT);
  pinMode(PB2, INPUT);
  pinMode(PB3, INPUT);
  pinMode(PB4, INPUT);
  pinMode(PB5, INPUT);
  pinMode(PB6, INPUT);
  pinMode(PB7, INPUT);
  pinMode(PB8, INPUT);
  for (int i = 0; i < 8; i++)
  {
    pinMode(led[i],
```



