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<div style="text-align: center;">

<a href="http://muhammaddimas211006.blogspot.com">[KEMBALI KE MENU  
SEBELUMNYA]</a></div>

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<b>DAFTAR ISI</b>

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<div style="text-align: left;">

<a href="#Prosedur">1. Prosedur</a></div>

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<a href="#Download">8. Download File</a><br />

</div><div style="text-align: left;"><br /></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;"><b><div style="font-size: medium; text-align: 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><br /></b></span></span></div>1. Prosedur </b>

<a name="Prosedur"></a>

<a href="#home" style="font-size: medium;">[Kembali]</a></span></span><div><div data-darkreader-inline-bgcolor="" data-darkreader-inline-border-bottom="" data-darkreader-inline-border-left="" data-darkreader-inline-border-right="" data-darkreader-inline-border-top="" style="--darkreader-inline-bgcolor: #191b1c; --darkreader-inline-border-bottom: initial; --darkreader-inline-border-left: initial; --darkreader-inline-border-right: initial; --darkreader-inline-border-top: initial; background-color: white; border: 0px; box-sizing: border-box; margin: 0px; padding: 0px;"><br /></div><div data-darkreader-inline-bgcolor="" data-darkreader-inline-border-bottom="" data-darkreader-inline-border-left="" data-darkreader-inline-border-right="" data-darkreader-inline-border-top="" style="--darkreader-inline-bgcolor: #191b1c; --darkreader-inline-border-bottom: initial; --darkreader-inline-border-left: initial; --darkreader-inline-border-right: initial; --darkreader-inline-border-top: initial; background-color: white; border: 0px; box-sizing: border-box; margin: 0px; padding: 0px;">1. Rangkai rangkaian pada alat sesuai dengan modul.<br />2. Tulis program untuk arduino di software Arduino IDE.<br />3. Compile program tadi, lalu upload ke dalam arduino.<br />4. Setelah program selesai di upload, jalankan rangkaian.</div><div data-darkreader-inline-bgcolor="" data-darkreader-inline-border-bottom="" data-darkreader-inline-border-left="" data-darkreader-inline-border-right="" data-darkreader-inline-border-top="" style="--darkreader-inline-bgcolor: #191b1c; --darkreader-inline-border-bottom: initial; --darkreader-inline-border-left: initial; --darkreader-inline-border-right: initial; --darkreader-inline-border-top: initial; background-color: white; border: 0px; box-sizing: border-box; margin: 0px; padding: 0px;"><br /></div><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: &quot;times&quot; , &quot;times new roman&quot; , serif;"><p data-darkreader-inline-bgcolor="" style="--darkreader-inline-bgcolor: #191b1c; background-color: white; font-family: &quot;Times New Roman&quot;;"><span style="font-family: times;"><b>Hardware :</b></span></p><div class="separator" style="clear: both; text-align: center;"><div class="separator" style="clear: both; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEgAl7y-opGyEOH259RkEPxioW OE1HhWzHOxPWVUbl8JhsDxBatCYJsOiUKgLS-QgUfDjdSaofbGPzICgbBwpc14W9TS-s-bgu4JM041fJIG mBsgaHEKBhpRCNlOsL4\_MP7cea5\_Y7RHOE8FadY7EXKkmef4xynLC-8keN3idRjEtrN1\_tFQwuoTJ6x9p Wg/s4096/WhatsApp%20Image%202024-03-26%20at%2021.28.01.jpeg" style="margin-left: 1em; margin-right: 1em;"><img border="0" data-original-height="4096" data-original-width="3072" height="320"

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1. Arduino

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2. Motor Servo

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3. Breadboard

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4. Keypad

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<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>3. Rangkaian Simulasi dan Prinsip Kerja </b>

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

<a href="#home">[Kembali]</a></span></span></div><div><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><br /></span></div><div><div class="separator" style="clear: both; text-align: center;"><div style="text-align: justify;"><div><span style="font-family: times, times new roman, serif;"><b>Gambar rangkaian</b></span></div><div><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><br /></span></div><div><div class="separator" style="clear: both; text-align: center;"><div class="separator" style="clear: both;"><br /></div><div class="separator" style="clear: both;"><br /></div><div class="separator" style="clear: both; text-align: center;"><div class="separator" style="clear: both; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEhi3MogYIceG7p5Ric9TFognr5-ORIOjivG5U37o18yfY6dNRInF\_X8xraLeZYISNUnmKug5n3rxlpubexB2qLrRBiyq1Tw1uCV7aGlkcEva5bbgjcGUhHbxysCN1loEsUIM1L-MTXRKCymAVG8GZF977x7QIMriD8d1nN1Sura06\_hqL31xp6XzoKpl/s4096/WhatsApp%20Image%202024-03-26%20at%2021.28.01.jpeg" style="margin-left: 1em; margin-right: 1em;"></a></div><br /><div class="separator" style="clear: both; text-align: center;"><br /></div><br /></div><br /></div><div style="text-align: justify;"><div style="text-align: left;"><br /></div><div style="text-align: center;"><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><div class="separator" style="clear: both;"><br /></div></span></div></div></div></div></div></div><br /></div></div><div><span style="font-family:

&quot;times&quot; , &quot;times new roman&quot; , serif;"><b><br /></b></span></div><div><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><b>Prinsip Kerja :</b></span></div><div><br /></div><div><div><span style="font-family: times; text-align: justify;">Pada percobaan ini, kita menggunakan keypad sebagai inputan. Sedangkan yang berfungsi sebagai keluaran atau output adalah motor servo. Beberapa tahapan prinsip kerjanya adalah:</span></div></div><div><span style="font-family: times; text-align: justify;"><br /></span></div><div><span style="font-family: times; text-align: justify;"><div>1. Inisialisasi: Pada awalnya, servo motor dihubungkan dan diberi posisi awal pada 90 derajat. Selain itu, keypad juga diinisialisasi dengan menentukan jumlah baris dan kolom, serta memetakan tombol-tombolnya.</div><div><br /></div><div>2. Loop Utama: Program akan terus berjalan di dalam loop utama. Setiap iterasi dari loop, program akan memeriksa tombol mana yang ditekan pada keypad.</div><div><br /></div><div>3. Pemeriksaan Tombol: Jika tombol pada keypad ditekan, karakter yang sesuai akan dibaca dari keypad.</div><div><br /></div><div>4. Aksi Berdasarkan Tombol: Berdasarkan tombol yang ditekan, program akan melakukan aksi tertentu terhadap servo motor:</div><div>&nbsp; &nbsp;&nbsp;- Tombol 1: Memindahkan servo ke posisi 0 derajat.</div><div>&nbsp; &nbsp;&nbsp;- Tombol 2: Memindahkan servo ke posisi 45 derajat.</div><div>&nbsp; &nbsp;&nbsp;- Tombol 3: Memindahkan servo ke posisi 90 derajat.</div><div>&nbsp; &nbsp;&nbsp;- Tombol 4: Memindahkan servo ke posisi 135 derajat.</div><div>&nbsp; &nbsp;&nbsp;- Tombol 5: Memindahkan servo ke posisi 180 derajat.</div><div>&nbsp; &nbsp;&nbsp;- Tombol 6: Memindahkan servo ke posisi 135 derajat (sama dengan tombol 4).</div><div>&nbsp; &nbsp;&nbsp;- Tombol 7: Memindahkan servo ke posisi 90 derajat (sama dengan tombol 3).</div><div>&nbsp; &nbsp;&nbsp;- Tombol 8: Memindahkan servo ke posisi 45 derajat (sama dengan tombol 2).</div><div>&nbsp; &nbsp;&nbsp;- Tombol 9: Memindahkan servo ke posisi 0 derajat (sama dengan tombol 1).</div></span></div><div><span style="background-color: white; font-family: times; text-align: justify;"><br /></span></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>4. Flowchart dan Listing Program </b>

<a name="Flowchart"></a>

<a href="#home">[Kembali]</a></span></span></div><p style="text-align: left;"><b style="font-family: times, &quot;times new roman&quot;, serif;">Flowchart :</b></p><div><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif;"><p style="font-family: &quot;Times New Roman&quot;;"><span style="font-family: times, times new roman, serif;"></span></p><div class="separator" style="clear: both; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEjT63giwgcqRBOy0BqaabuCwYYL5CnSniidqaDXvIEO5b\_8tWECupOHX0vrF1jf\_HNpoTH3mnD6osqeelDGjZyWE7ysPxltk5U8WUCyVwtgbYC9wiYoJVV8Y0X0qypcDqD0nYWo40vK3sSmRhoHvxAXD6mLmZacOma0VVt7BQWzBUF\_qTjJU3iNmVhp\_9U/s506/Screenshot%202024-03-27%20092921.png" style="margin-left: 1em; margin-right: 1em;"></a></div><br /><div class="separator" style="clear: both; text-align: center;"><br /></div><div class="separator" style="clear: both; font-family: &quot;Times New Roman&quot;; text-align: center;"><br /></div><span style="font-family: times, times new roman, serif;"><b>Listing Program



&quot;times&quot; , &quot;times new roman&quot; , serif;"><br /></span></div><div class="separator" style="clear: both; text-align: center;"><iframe allowfullscreen="" class="BLOG\_video\_class" height="266" src="https://www.youtube.com/embed/rS\_kR\_2t1ds" width="320" youtube-src-id="rS\_kR\_2t1ds"></iframe></div><br /><div class="separator" style="clear: both; text-align: center;"><br /></div><div class="separator" style="clear: both; text-align: center;"><br /></div></div><div class="separator" style="clear: both; text-align: center;"><br /></div></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>7. Soal Analisa </b>

<a name="Soal"></a>

<a href="#home" style="font-size: medium;">[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;"><div>1. Apakah motor servo dapat berfungsi tanpa PWM? Kenapa hal seperti itu bisa terjadi?&nbsp;</div><div><br /></div><div>2. Bagaimana cara motor servo bisa bergerak sesuai arah yang ditekan pada keypad nilai apa yang diberikan oleh keypad pada motor servo?</div></span></div><div><span style="font-family: times, times new roman, serif;"><div class="separator" style="clear: both; text-align: center;"><br /></div><br /><div style="text-align: center;"><br /></div></span></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>8. Download File </b>

<a name="Download"></a>

<a href="#home">[Kembali]</a></span></span><br />

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