
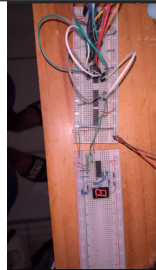


# Bitacora Proyecto 1-Funda

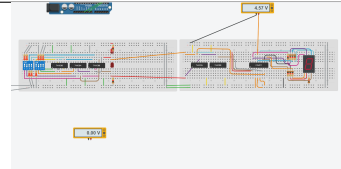
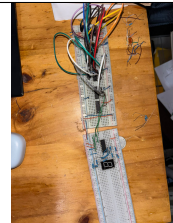
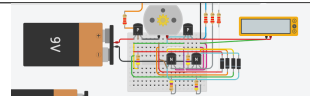
Joan Ugalde - Raymond Araya

Septiembre 2025

## 1. Bitácora de Actividades

| Actividad   | Fecha             | Estudiante                 | Evidencia  |                  |                            |   |         |   |            |          |   |             |      |   |   |
|---|-------------------|----------------------------|--|------------------|----------------------------|---|---------|---|------------|----------|---|-------------|------|---|---|
| Diseño Decodificador Abrir y cerrar puerta  | 09/09/25          | Raymond Araya, Joan Ugalde | <table><tr><th>Pattern (A7..A0)</th><th>OPEN</th><th>Meaning</th></tr><tr><td>1111011</td><td>1</td><td>Abrir (KO)</td></tr><tr><td>10111011</td><td>0</td><td>Cerrar (KC)</td></tr><tr><td>Otro</td><td>X</td><td>—</td></tr></table> | Pattern (A7..A0) | OPEN                       | Meaning   | 1111011 | 1 | Abrir (KO) | 10111011 | 0 | Cerrar (KC) | Otro | X | — |
|   |                   |                            | Pattern (A7..A0)   | OPEN             | Meaning                    |   |         |   |            |          |   |             |      |   |   |
|   |                   |                            | 1111011  | 1                | Abrir (KO)                 |   |         |   |            |          |   |             |      |   |   |
|   |                   |                            | 10111011   | 0                | Cerrar (KC)                |   |         |   |            |          |   |             |      |   |   |
|   |                   |                            | Otro   | X                | —                          |   |         |   |            |          |   |             |      |   |   |
|  |                   |                            |  |                  |                            |   |         |   |            |          |   |             |      |   |   |
|   | Simular Tinkercad | 10/09/25                   | Raymond Araya, Joan Ugalde   |                  |                            |   |         |   |            |          |   |             |      |   |   |
|   |                   |                            |  |                  |                            |   |         |   |            |          |   |             |      |   |   |
|   |                   |                            |  |                  |                            |   |         |   |            |          |   |             |      |   |   |
| Montaje   | 12/09/25          | Raymond Araya, Joan Ugalde |    |                  |                            |   |         |   |            |          |   |             |      |   |   |
|   |                   |                            | Probar   | 14/09/25         | Raymond Araya, Joan Ugalde |  |         |   |            |          |   |             |      |   |   |

**Cuadro 1.** Bitácora Taller + Proyecto

| Actividad                   | Fecha    | Estudiante                 | Evidencia   |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------------|----------|----------------------------|---|------------------|------|---------|--------|------|------------|----------|---|-------------|------|----|----|-------------|--------|----|----|----|----|----|----|------|-------|---|---|----|----|----|----|-------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Diseño Serializador         | 09/09/25 | Raymond Araya, Joan Ugalde | <table><tr><th>Pattern (A7..A0)</th><th>OPEN</th><th>Meaning</th></tr><tr><td>111011</td><td>1</td><td>Abrir (KO)</td></tr><tr><td>10111011</td><td>0</td><td>Cerrar (KC)</td></tr><tr><td>Otro</td><td>X</td><td>—</td></tr></table> <table><tr><th>A7</th><th>A6</th><th>A5</th><th>A4</th><th>A3</th><th>A2</th><th>A1</th><th>A0</th><th>OPEN</th><th>CLOSE</th><th>O</th><th>C</th><th>D3</th><th>D2</th><th>D1</th><th>D0</th><th>Digit (BCD)</th><th>Estado</th></tr><tr><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>OPEN</td></tr><tr><td>1</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>CLOSE</td></tr></table> | Pattern (A7..A0) | OPEN | Meaning | 111011 | 1    | Abrir (KO) | 10111011 | 0 | Cerrar (KC) | Otro | X  | —  | A7          | A6     | A5 | A4 | A3 | A2 | A1 | A0 | OPEN | CLOSE | O | C | D3 | D2 | D1 | D0 | Digit (BCD) | Estado | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | OPEN | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | CLOSE |
| Pattern (A7..A0)            | OPEN     | Meaning                    |   |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| 111011                      | 1        | Abrir (KO)                 |   |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| 10111011                    | 0        | Cerrar (KC)                |   |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| Otro                        | X        | —                          |   |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| A7                          | A6       | A5                         | A4  | A3               | A2   | A1      | A0     | OPEN | CLOSE      | O        | C | D3          | D2   | D1 | D0 | Digit (BCD) | Estado |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| 0                           | 0        | 1                          | 1   | 1                | 0    | 1       | 1      | 1    | 0          | 1        | 0 | 0           | 0    | 0  | 1  | 1           | OPEN   |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| 1                           | 0        | 1                          | 1   | 1                | 0    | 1       | 1      | 0    | 1          | 0        | 1 | 1           | 0    | 0  | 0  | 0           | CLOSE  |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| Implementación serializador | 10/09/25 | Raymond Araya, Joan Ugalde |    |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| Visualizador Led            | 12/09/25 | Raymond Araya, Joan Ugalde |    |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| Trabajo en el Puente H      | 20/09/25 | Raymond Araya, Joan Ugalde |    |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| Ajustes al Serializador     | 21/09/25 | Raymond Araya, Joan Ugalde | Se corrigieron detalles en la implementación del serializador para mejorar la sincronización con el visualizador LED.   |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
| Corrección en Display       | 22/09/25 | Raymond Araya, Joan Ugalde | Se ajustó la lógica del display para que muestre correctamente las letras C, F y E de acuerdo con las entradas de control.  |                  |      |         |        |      |            |          |   |             |      |    |    |             |        |    |    |    |    |    |    |      |       |   |   |    |    |    |    |             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |

**Cuadro 2.** Bitácora Taller + Proyecto