

Lampiran Source Code

```
#include <Keypad.h>
#include <Servo.h>
#include "Arduino.h"

Servo servoku;

#include "Arduino.h"

#if !defined(SERIAL_PORT_MONITOR)
  #error "Arduino version not supported. Please update your IDE to the latest version."
#endif

#if defined(_SAMD21G18A_)
  // Shield Jumper on HW (for Zero, use Programming Port)
  #define port SERIAL_PORT_HARDWARE
  #define pcSerial SERIAL_PORT_MONITOR
#elif defined(SERIAL_PORT_USBVIRTUAL)
  // Shield Jumper on HW (for Leonardo and Due, use Native Port)
  #define port SERIAL_PORT_HARDWARE
  #define pcSerial SERIAL_PORT_USBVIRTUAL
#else
  // Shield Jumper on SW (using pins 12/13 or 8/9 as RX/TX)
  #include "SoftwareSerial.h"

  SoftwareSerial port(12, 13);
  #define pcSerial SERIAL_PORT_MONITOR
#endif

#include "EasyVR.h"

EasyVR easyvr(port);

//Groups and Commands

enum Groups
```

```
{
    GROUP_0 = 0,
    GROUP_1 = 1,
    GROUP_2 = 2,
    GROUP_16 = 16,
};
enum Group0
{
    G0_DAVID = 0,
};
enum Group1
{
    G1_OPENHENDRA = 0,
    G1_OPENPANJI = 1,
    G1_STARTENGINE = 2,
    G1_SHUTDOWN = 3,
};
enum Group2
{
    G2_THANKSHENDRA = 0,
    G2_THANKSPANJI = 1,
};
enum Group16
{
    G16_HENDRA = 0,
};
//Grammars and Words
```

```
enum Wordsets
{
    SET_1 = -1,
    SET_2 = -2,
    SET_3 = -3,
};

enum Wordset1
{
    S1_ACTION = 0,
    S1_MOVE = 1,
    S1_TURN = 2,
    S1_RUN = 3,
    S1_LOOK = 4,
    S1_ATTACK = 5,
    S1_STOP = 6,
    S1_HELLO = 7,
};

enum Wordset2
{
    S2_LEFT = 0,
    S2_RIGHT = 1,
    S2_UP = 2,
    S2_DOWN = 3,
    S2_FORWARD = 4,
    S2_BACKWARD = 5,
};

enum Wordset3
```

```
{  
  S3_ZERO = 0,  
  S3_ONE = 1,  
  S3_TWO = 2,  
  S3_THREE = 3,  
  S3_FOUR = 4,  
  S3_FIVE = 5,  
  S3_SIX = 6,  
  S3_SEVEN = 7,  
  S3_EIGHT = 8,  
  S3_NINE = 9,  
  S3_TEN = 10,  
};  
// use negative group for wordsets  
int8_t group, idx;  
// ultrasonic & buzzer  
const int trigPin = A1;  
const int echoPin = A2;  
const int trigPin2 = 10;  
const int echoPin2 = 11;  
const int buzzer = A3;  
//declare  
long duration;  
int distance;  
long duration2;  
int distance2;  
int safetyDistance;
```

```
int safetyDistance2;
const byte n_rows = 4;
const byte n_cols = 4;
char keys[n_rows][n_cols] = {
    {'1','2','3','A'},
    {'4','5','6','B'},
    {'7','8','9','C'},
    {'*','0','#','D'}
};
byte colPins[n_rows] = {5, 4, 3, 2};
byte rowPins[n_cols] = {9, 8, 7, 6};
Keypad keypad = Keypad( makeKeymap(keys), rowPins, colPins, n_rows, n_cols );
String passcode="";
String myPasscode="5432"; //predefined passcode, change as per your desire
boolean easyVR = false;
boolean ledPin_state;
```