

LAMPIRAN PROGRAM

SISTEM KENDALI CERDAS
UNTUK MINIATUR PINTU PARKIR OTOMATIS BERBASIS
MIKROKONTROLLER AT89S51
PADA INSTANSI PEMERINTAHAN XYZ

```

Ir1                bit p0.0
Ir2                bit p0.1
Rel1a              bit p2.4
Rel1b              bit p2.5
Rel2a              bit p2.6
Rel2b              bit p2.7
KbdData            bit p3.3
KbdClock           bit p3.2
DataKeyboard equ 30h
;=====
;main program
;=====
Org    00h
      Mov p2,#00h
      Call delay
      Mov p2,#ffh
      Call delay
      Mov p2,#00h
      Call delay

Mulai:
Sen1 :
      jnb ir1,$           ;sensor 1
      setb rel1a         ;gerbang utama buka
      clr rel1b
      call delay
      call delay
      call delay
      jb ir1,$           ;tunggu sampai mobil melewati
sensor 1
      clr rel1a         ;gerbang utama menutup
      setb rel1b
      call delay
      call delay
      call delay
      clr rel1a         ;motor gerbang utama mati
      clr rel1b

Forever :
      jB KbdClock,$
      call GetDatakeyboard

```



```

barcode3:
    cjne r5,#33h,barcode1      ;pintu untuk mobil besar buka
    setb rel2a
    clr rel2b
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    clr rel2a                  ;motor pintu off
    clr rel2b
    jnb ir2,$                  ;menunggu mobil melewati sensor 2
    clr rel2a
    setb rel2b
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    call delay
    ajmp tutup_pintu

```

```

tutup_pintu:
    clr rel2a
    clr rel2b
    ajmp mulai

```

```

;=====
;Subroutine Get Data From Keyboard
;=====

```

```

GetDataKeyBoard :
    call Get_scancode
    cjne a,#0f0h,kybd_pressed
    JB KbdClock,$
    call Get_Scancode
    setb c

```

```

        call Convert_scancode
        ret
;
Kybd_pressed:
        clr c
        ret
;
;=====
;Subroutine convert scan data
;Using look Up Table
;=====
Convert_ScanCode :
        Mov datakeyboard, a
        Mov DPTR, #tableKeyboard
        Movc A,@A+DPTR
        Mov DataKeyboard, A

Get_scancode :
        Clr A
        Jnb KbdClock, $
        Mov R0, $8

Get_ScanCode2 :
        Jb KbdClock, $
        Mov C, KbdData
        Rr A
        Mov acc, 7, C
        Jnb KbdClock, $
        Djnz R0, Get_Scan Code2
        Jb KbdClock, $
        Jnb KbdClock, $
        Jb KbdClock, $
        Jnb KbdClock, $
        Ret

Delay : mov     r5, #10h           ;program tunda
Deley1 : mov    r6, #0ffh
Deley2 : mov    r7, #0ffh
        Djnz   r7, $
        Djnz   r6, deley2
        Djnz   r5, deley1
pada program saat label           ;ret→ return yaitu kembali
                                   ;dipanggil

```

TabelleKeyboard :

```

Db      00
Db      0f9H
DB      00
DB      0F5H, 0F3H, 0F1H, 0F2H, 0FCH
DB      00H
DB      0FAH, 0F8H, 0F4H
DB      0C0H
DB      '˘'
DB      00H
DB      00H
DB      0C1H
DB      0C2H
DB      00H
DB      0C3H
DB      'Q1'
DB      00H, 00H, 00H
DB      'ZSAW2'
DB      00H, 00H
DB      'CXDE43'
DB      00H, 00H
DB      ' VFTR5'
DB      00H, 00H
DB      00H, 00H
DB      'NBHGY6'
DB      00H, 00H, 00H
DB      'MJU78'
DB      00H, 00H
DB      ',K1009'
DB      00H, 00H
DB      './L; P-'

```

```

DB 00H,00H,00H
DB 27H
DB 00H
DB '['
DB 00H,00H
DB 0C5H
DB 0C6H
DB 0AH

```

