$prog &HFF , &HFF , &HC9 , &H00   ' generated. Take care that the chip supports all fuse bytes.

$regfile = "m32def.dat"

$crystal = 8000000

$hwstack = 40

$swstack = 16

$framesize = 32

'/////////////LCD config

Config Lcdpin = Pin , Db4 = Portc.4 , Db5 = Portc.5 , Db6 = Portc.6 , Db7 = Portc.7 , E = Portc.1 , Rs = Portc.0

Config Lcd = 16 * 2

'////////////////////////

Cursor Off

' **** inisialisasi penggunaan pin pada sensor warna

Config Portc = Output

Config Portd.6 = Output

Config Portd.2 = Output

Config Portd.3 = Output

Config Portd.4 = Output

Config Portd.5 = Output

Config Portd.7 = Input

Portd.7 = 1

Outhz Alias Pind.7

S2 Alias Portd.6

S3 Alias Portd.2

S0 Alias Portd.3

S1 Alias Portd.4

Oe Alias Portd.5

```
'*** inisialisasi frequensi

Dim Tanda1detik As Bit

Dim Frequensi As Word

Dim Fmerah As Word

Dim Fhijau As Word

Dim Fbiru As Word

Dim Fputih As Word


'**** inisialisasi kotak tinggi

Start Adc

Config Adc = Single , Prescaler = Auto

Enable Interrupts

Dim Ft1 As Long

Dim Ft2 As Long

Dim Ft3 As Long

Dim Ft4 As Long


'****** inisialisasi servo

Config Servos = 4 , Servo1 = Portb.1 , Servo2 = Portb.2 , Servo3 = Portb.3 , Servo4 = Portb.4
, Reload = 30 , Interval = 255

Config Portb = Output


Enable Interrupts



Portc = 255

'inisialisasi penggunaan timer 1/4 detik untuk penghitung frekuensi

Config Timer1 = Timer , Prescale = 256

Const Inisial = &HAE80                        '5740
```

```
On Timer1 Timer1_isr                    ' timer0 overflow interrupt

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Disable Timer1                          ' aktifkan timer enable Ovf0

Enable Interrupts                       ' aktifkan semua interup


S0 = 0

S1 = 1


Oe = 0


Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80


'----------------------------'
Do
Cls
'masukkan kotak


Locate 1 , 1
Lcd "mengukur tinggi kotak"
Waitms 2000
Cls


'??????????????deteksi tinggi kotak??????????????????


Ft1 = Getadc(0)
```

```
Ft2 = Getadc(1)

Ft3 = Getadc(2)

Ft4 = Getadc(3)


'Lcd " Ft1 Ft2 Ft3 Ft4 "

Locate 1 , 1

Lcd Ft1 ; " "

Locate 1 , 5

Lcd Ft2 ; " "

Locate 1 , 9

Lcd Ft3 ; " "

Locate 1 , 13

Lcd Ft4 ; " "

'----------------------------'

'@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@


'If Ft1 > 20 And Ft1 < 300 Then

'If Ft2 > 20 And Ft2 < 300 Then

'If Ft3 > 20 And Ft3 < 300 Then

'If Ft4 > 20 And Ft4 < 300 Then


'Goto Tinggi_sangat_kecil


'-------'

'End If

'End If

'End If

'End If
```

```
'@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

If Ft1 > 20 And Ft1 < 300 Then
If Ft2 > 20 And Ft2 < 300 Then
If Ft3 > 20 And Ft3 < 300 Then
If Ft4 > 400 And Ft4 < 1300 Then

Goto Tinggi_kecil

'-------'
End If
End If
End If
End If

'@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

If Ft1 > 20 And Ft1 < 300 Then
If Ft2 > 20 And Ft2 < 300 Then
If Ft3 > 400 And Ft3 < 1300 Then
If Ft4 > 400 And Ft4 < 1300 Then

Goto Tinggi_sedang

'-------'
End If
End If
End If
End If
```

```
'@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

If Ft1 > 20 And Ft1 < 300 Then
If Ft2 > 400 And Ft2 < 1300 Then
If Ft3 > 400 And Ft3 < 1300 Then
If Ft4 > 400 And Ft4 < 1300 Then

Goto Tinggi_besar

'-------'
End If
End If
End If
End If


'@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

If Ft1 > 400 And Ft1 < 1300 Then
If Ft2 > 400 And Ft2 < 1300 Then
If Ft3 > 400 And Ft3 < 1300 Then
If Ft4 > 400 And Ft4 < 1300 Then

Goto Tinggi_sangat_besar

'-------'
End If
End If
End If
```

End If

'@@@

Loop

Timer1_isr: ' untuk 1 kali interupsi/detik

Tcnt1l = Low(inisial)   ' inisialisasi spt ini

Tcnt1h = High(inisial)

Tanda1detik = 1

Toggle Portc.0

Return

End

'//////////////////tinggi sangat kecil//////////////////////

'Tinggi_sangat_kecil:

'Goto Deteksi_warna_sangat_kecil

'Return

'//////////////////tinggi sangat kecil//////////////////////

'//////////////////tinggi kecil//////////////////////

Tinggi_kecil:

Locate 2 , 1

Lcd "kotak kecil"

Waitms 2000

Cls

```
Locate 1 , 1

Lcd "deteksi warna"

Waitms 2000

Cls

Goto Deteksi_warna_kecil


Return
'///////////////////tinggi kecil///////////////////


'///////////////////tinggi sedang///////////////////

Tinggi_sedang:

Locate 2 , 1

Lcd "kotak sedang"

Waitms 2000

Cls

Locate 1 , 1

Lcd "deteksi warna"

Waitms 2000

Cls

Goto Deteksi_warna_sedang


Return
'///////////////////tinggi sedang///////////////////



'///////////////////tinggi besar///////////////////

Tinggi_besar:

Locate 2 , 1

Lcd "kotak besar"
```

```
Waitms 2000

Cls

Locate 1 , 1

Lcd "deteksi warna"

Waitms 2000

Cls

Goto Deteksi_warna_besar


Return
'///////////////////tinggi besar////////////////////


'///////////////////tinggi sangat besar////////////////////

Tinggi_sangat_besar:

Locate 2 , 1

Lcd "kotak sangat besar"

Waitms 2000

Cls

Locate 1 , 1

Lcd "deteksi warna"

Waitms 2000

Cls

Goto Deteksi_warna_sangat_besar


Return
'///////////////////tinggi sangat besar////////////////////




'///////////////////deteksi warna////////////////////
```

'kotak sangat kecil///////////////////////////////

'Deteksi_warna_sangat_kecil:

'--

'deteksi warna

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fputih = Frequensi

'*** deteksi merah

S2 = 0

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fmerah = Frequensi

'*** deteksi biru

S2 = 0

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fbiru = Frequensi

'*** deteksi hijau

S2 = 1

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fhijau = Frequensi

'--

'--

'If Fmerah > 150 And Fmerah < 250 Then

'If Fbiru > 150 And Fbiru < 250 Then

'If Fhijau > 150 And Fhijau < 250 Then

```
'Goto Warna_coklat_sangat_kecil


'End If

'End If

'End If
'-----------------------------------------------------------------------


'-----------------------------------------------------------------------

'If Fmerah > 600 And Fmerah < 700 Then

'If Fbiru > 550 And Fbiru < 650 Then

'If Fhijau > 600 And Fhijau < 700 Then


'Goto Warna_kuning_sangat_kecil


'End If

'End If

'End If
'-----------------------------------------------------------------------

Wait 1


Return
'kotak sangat kecil//////////////////////////////////////




'kotak kecil////////////////////////////////////
Deteksi_warna_kecil:
'-----------------------------------------------------------------------
```

'deteksi warna

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fputih = Frequensi

'*** deteksi merah

S2 = 0

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fmerah = Frequensi

'*** deteksi biru

S2 = 0

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fbiru = Frequensi

'*** deteksi hijau

S2 = 1

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fhijau = Frequensi

'---

'---

If Fmerah > 600 And Fmerah < 700 Then

If Fbiru > 550 And Fbiru < 650 Then

If Fhijau > 600 And Fhijau < 700 Then

Goto Warna_kuning_kecil

Else

```
Goto Warna_tidak_sesuai


End If

End If

End If
'-----------------------------------------------------------------------


'-----------------------------------------------------------------------

If Fmerah > 140 And Fmerah < 250 Then

If Fbiru > 100 And Fbiru < 200 Then

If Fhijau > 450 And Fhijau < 550 Then


Goto Warna_biru_kecil

Else

Goto Warna_tidak_sesuai


End If

End If

End If
'-----------------------------------------------------------------------

Wait 1


Return
'kotak kecil/////////////////////////////////////



'kotak sedang/////////////////////////////////////

Deteksi_warna_sedang:
```

'---

'deteksi warna

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fputih = Frequensi

'*** deteksi merah

S2 = 0

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fmerah = Frequensi

'*** deteksi biru

S2 = 0

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fbiru = Frequensi

'*** deteksi hijau

S2 = 1

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fhijau = Frequensi

'--

'--

If Fmerah > 150 And Fmerah < 250 Then

If Fbiru > 150 And Fbiru < 250 Then

If Fhijau > 150 And Fhijau < 250 Then

Goto Warna_coklat_sedang

Else

Goto Warna_tidak_sesuai

End If

End If

End If

'--

'--

If Fmerah > 150 And Fmerah < 250 Then

If Fbiru > 100 And Fbiru < 200 Then

If Fhijau > 450 And Fhijau < 550 Then

Goto Warna_biru_sedang

Else

Goto Warna_tidak_sesuai

End If

End If

End If

'--

Wait 1

Return

'kotak sedang//////////////////////////////////////

'kotak besar////////////////////////////////

Deteksi_warna_besar:

'--

'deteksi warna

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fputih = Frequensi

'*** deteksi merah

S2 = 0

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fmerah = Frequensi

'*** deteksi biru

S2 = 0

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fbiru = Frequensi

'*** deteksi hijau

S2 = 1

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fhijau = Frequensi

'--

'--

If Fmerah > 500 And Fmerah < 600 Then

If Fbiru > 450 And Fbiru < 550 Then

If Fhijau > 300 And Fhijau < 450 Then

```
Goto Warna_merah_besar

Else

Goto Warna_tidak_sesuai


End If

End If

End If

'---------------------------------------------------------------------------


'---------------------------------------------------------------------------

If Fmerah > 150 And Fmerah < 250 Then

If Fbiru > 150 And Fbiru < 250 Then

If Fhijau > 300 And Fhijau < 400 Then


Goto Warna_hijau_besar

Else

Goto Warna_tidak_sesuai


End If

End If

End If

'---------------------------------------------------------------------------

Wait 1


Return

'kotak besar//////////////////////////////////
```

'kotak sangat besar/////////////////////////////////

Deteksi_warna_sangat_besar:

'---

'deteksi warna

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

'*** deteksi putih

S2 = 1

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fputih = Frequensi

'*** deteksi merah

S2 = 0

S3 = 0

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fmerah = Frequensi

'*** deteksi biru

S2 = 0

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fbiru = Frequensi

'*** deteksi hijau

S2 = 1

S3 = 1

Frequensi = 0

Tanda1detik = 0

Tcnt1l = Low(inisial)

Tcnt1h = High(inisial)

Enable Timer1

Do

Bitwait Outhz , Set

Bitwait Outhz , Reset

Frequensi = Frequensi + 1

Loop Until Tanda1detik = 1

Disable Timer1   ' aktifkan timer enable Ovf0

Fhijau = Frequensi

'---

'---

If Fmerah > 500 And Fmerah < 600 Then

If Fbiru > 450 And Fbiru < 550 Then

If Fhijau > 300 And Fhijau < 450 Then

```
                Goto Warna_merah_sangat_besar

                Else

                Goto Warna_tidak_sesuai


                End If

                End If

                End If
'----------------------------------------------------------------------------


'----------------------------------------------------------------------------
                If Fmerah > 150 And Fmerah < 250 Then

                If Fbiru > 150 And Fbiru < 250 Then

                If Fhijau > 300 And Fhijau < 400 Then


                Goto Warna_hijau_sangat_besar

                Else

                Goto Warna_tidak_sesuai


                End If

                End If

                End If
'----------------------------------------------------------------------------
                Wait 1


                Return
'kotak sangat besar////////////////////////////////////
'///////////////////////deteksi warna/////////////////////////////
```

'///////////////////warna coklat/////////////////////////

'/////////coklat sedang//////////////

Warna_coklat_sedang:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna coklat"

Waitms 2000

Cls

'-----------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000

'/---------------------//////////////

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 27

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 27

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 27

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 27

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 56

```
Servo(2) = 25
Servo(3) = 40
Servo(4) = 100
Wait 2


Servo(1) = 56
Servo(2) = 19
Servo(3) = 46
Servo(4) = 100
Wait 2


Servo(1) = 56
Servo(2) = 19
Servo(3) = 46
Servo(4) = 20
Wait 2


Servo(1) = 56
Servo(2) = 20
Servo(3) = 45
Servo(4) = 80
Wait 2


Cls
Locate 1 , 1
Lcd "kotak telah sampai"
Waitms 2000
Cls
```

Return

'/////////coklat sedang//////////////

'/////////coklat sangat kecil//////////////

Warna_coklat_sangat_kecil:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "kotak sangat kecil"

Waitms 2000

Cls

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna coklat"

Waitms 2000

Cls

'------------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000

'/----------------------//////////////

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 25

Servo(3) = 38

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 25

Servo(3) = 38

Servo(4) = 20

Wait 2

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

'--------------------//////////////////

```
Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls


Return

'//////////coklat sangat kecil//////////////

'///////////////////warna coklat///////////////////////////


'////////////////////////warna merah/////////////////////////////

'//////////merah besar//////////////

Warna_merah_besar:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna merah"

Waitms 2000

Cls

'-----------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000
```

'/----------------------//////////////

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

'/----------------------//////////////

Wait 2

Servo(1) = 47
Servo(2) = 20
Servo(3) = 25
Servo(4) = 100
Wait 2

Servo(1) = 47
Servo(2) = 20
Servo(3) = 40
Servo(4) = 100
Wait 2

Servo(1) = 47
Servo(2) = 18
Servo(3) = 40
Servo(4) = 100
Wait 2

Servo(1) = 47
Servo(2) = 18
Servo(3) = 40
Servo(4) = 20
Wait 2

Servo(1) = 47
Servo(2) = 18

```
Servo(3) = 40

Servo(4) = 100

Wait 2


Servo(1) = 47

Servo(2) = 19

Servo(3) = 46

Servo(4) = 100

Wait 2


Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2


'--------------------//////////////////
Cls
Locate 1 , 1
Lcd "kotak telah sampai"
Waitms 2000
Cls


Return
'/////////merah besar//////////////


'/////////merah sangat besar//////////////
Warna_merah_sangat_besar:
'Lcd " Fmerah Fbiru Fhijau "
```

```
Locate 1 , 1
Lcd Fmerah ; " "
Locate 1 , 5
Lcd Fbiru ; " "
Locate 1 , 9
Lcd Fhijau ; " "
Locate 2 , 1
Lcd "warna merah"
Waitms 2000
Cls
'----------------------------------'
Locate 1 , 1
Lcd "memulai proses"
Waitms 1000
'/----------------------///////////////
Servo(1) = 56
Servo(2) = 20
Servo(3) = 45
Servo(4) = 80
Wait 2

Servo(1) = 28
Servo(2) = 24
Servo(3) = 25
Servo(4) = 20
Wait 2

Servo(1) = 28
Servo(2) = 24
```

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 46

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 46

Servo(2) = 25

Servo(3) = 40

Servo(4) = 100

Set Portb.0

Wait 2

Servo(1) = 46

Servo(2) = 26

Servo(3) = 40

Servo(4) = 100

Wait 2

Servo(1) = 46

Servo(2) = 26

Servo(3) = 40

Servo(4) = 20

Wait 2

Servo(1) = 46

Servo(2) = 26

Servo(3) = 40

Servo(4) = 100

Reset Portb.0

Wait 2

Servo(1) = 46

Servo(2) = 19

Servo(3) = 46

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

```
Servo(4) = 80

Wait 2


'--------------------//////////////////

Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls


Return

'/////////merah sangat besar//////////////

'////////////////////////warna merah///////////////////////////


'////////////////////////warna kuning///////////////////////////

'/////////kuning kecil//////////////

Warna_kuning_kecil:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna kuning"

Waitms 2000

Cls
```

```
'------------------------------------'
Locate 1 , 1
Lcd "memulai proses"
Waitms 1000
'/----------------------//////////////
Servo(1) = 56
Servo(2) = 20
Servo(3) = 45
Servo(4) = 80
Wait 2


Servo(1) = 28
Servo(2) = 24
Servo(3) = 25
Servo(4) = 20
Wait 2


Servo(1) = 28
Servo(2) = 24
Servo(3) = 39
Servo(4) = 20
Wait 2


Servo(1) = 28
Servo(2) = 24
Servo(3) = 39
Servo(4) = 100
Wait 2
```

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 62

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 62

Servo(2) = 25

Servo(3) = 40

Servo(4) = 100

Set Portb.0

Wait 2

Servo(1) = 62

Servo(2) = 30

Servo(3) = 40

Servo(4) = 100

Wait 2

Servo(1) = 62

Servo(2) = 30

Servo(3) = 40

```
Servo(4) = 20

Wait 2


Servo(1) = 62

Servo(2) = 25

Servo(3) = 40

Servo(4) = 100

Reset Portb.0

Wait 2


Servo(1) = 62

Servo(2) = 19

Servo(3) = 46

Servo(4) = 100

Wait 2


Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2


'--------------------//////////////////

Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls
```

Return

'////////kuning kecil//////////////

'////////kuning sangat kecil//////////////

Warna_kuning_sangat_kecil:

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "kotak sangat kecil"

Waitms 2000

Cls

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna kuning"

Waitms 2000

Cls

'------------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000

'/---------------------//////////////

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

```
Servo(4) = 100

Wait 2


Servo(1) = 38

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2


Servo(1) = 38

Servo(2) = 25

Servo(3) = 39

Servo(4) = 100

Wait 2


Servo(1) = 38

Servo(2) = 25

Servo(3) = 39

Servo(4) = 20

Wait 2


Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2


'--------------------//////////////////

Cls
```

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls

Return

'/////////kuning sangat kecil//////////////

'/////////////////////////warna kuning/////////////////////////////

'/////////////////////////warna hijau/////////////////////////////

'/////////hijau besar//////////////

Warna_hijau_besar:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna hijau"

Waitms 2000

Cls

'------------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000

'/----------------------//////////////

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

```
Servo(1) = 62

Servo(2) = 18

Servo(3) = 25

Servo(4) = 100

Wait 2


Servo(1) = 62

Servo(2) = 18

Servo(3) = 39

Servo(4) = 100

Wait 2


Servo(1) = 62

Servo(2) = 18

Servo(3) = 39

Servo(4) = 20

Wait 2


Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2
'--------------------//////////////////
Cls
Locate 1 , 1
Lcd "kotak telah sampai"
Waitms 2000
```

```
Cls

Return
'/////////hijau besar//////////////

'/////////hijau sangat besar//////////////
Warna_hijau_sangat_besar:
'Lcd " Fmerah Fbiru Fhijau "
Locate 1 , 1
Lcd Fmerah ; " "
Locate 1 , 5
Lcd Fbiru ; " "
Locate 1 , 9
Lcd Fhijau ; " "
Locate 2 , 1
Lcd "warna hijau"
Waitms 2000
Cls
'-----------------------------------'
Locate 1 , 1
Lcd "memulai proses"
Waitms 1000
'/----------------------//////////////
Servo(1) = 56
Servo(2) = 20
Servo(3) = 45
Servo(4) = 80
Wait 2
```

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 62

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 62

Servo(2) = 25

Servo(3) = 40

Servo(4) = 100

Set Portb.0

Wait 2

Servo(1) = 62

Servo(2) = 27

Servo(3) = 40

Servo(4) = 100

Wait 2

Servo(1) = 62

Servo(2) = 27

Servo(3) = 40

Servo(4) = 20

Wait 2

Servo(1) = 62

Servo(2) = 27

Servo(3) = 40

Servo(4) = 100

Reset Portb.0

Wait 2

Servo(1) = 62

Servo(2) = 19

Servo(3) = 46

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

'---------------------//////////////////

Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls

Return

'/////////hijau sangat besar//////////////

'/////////////////////////warna hijau////////////////////////////////

'/////////////////////////warna biru////////////////////////////////

'/////////biru kecil//////////////

Warna_biru_kecil:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

```
Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna biru"

Waitms 2000

Cls

'----------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000

'/----------------------//////////////

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2


Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2


Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20
```

Wait 2

Servo(1) = 28
Servo(2) = 24
Servo(3) = 39
Servo(4) = 100
Wait 2

Servo(1) = 28
Servo(2) = 20
Servo(3) = 25
Servo(4) = 100
Wait 2

Servo(1) = 74
Servo(2) = 25
Servo(3) = 25
Servo(4) = 100
Wait 2

Servo(1) = 74
Servo(2) = 25
Servo(3) = 40
Servo(4) = 100
Set Portb.0
Wait 2

Servo(1) = 74

Servo(2) = 30

Servo(3) = 40

Servo(4) = 100

Wait 2

Servo(1) = 74

Servo(2) = 30

Servo(3) = 40

Servo(4) = 20

Wait 2

Servo(1) = 74

Servo(2) = 25

Servo(3) = 40

Servo(4) = 100

Reset Portb.0

Wait 2

Servo(1) = 74

Servo(2) = 19

Servo(3) = 46

Servo(4) = 100

Wait 2

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

```
'--------------------//////////////////

Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls


Return
'/////////biru kecil//////////////


'/////////biru sedang//////////////

Warna_biru_sedang:

'Lcd " Fmerah Fbiru Fhijau "

Locate 1 , 1

Lcd Fmerah ; " "

Locate 1 , 5

Lcd Fbiru ; " "

Locate 1 , 9

Lcd Fhijau ; " "

Locate 2 , 1

Lcd "warna biru"

Waitms 2000

Cls
'-----------------------------------'

Locate 1 , 1

Lcd "memulai proses"

Waitms 1000

'/----------------------//////////////

Servo(1) = 56
```

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

```
Servo(1) = 76

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2


Servo(1) = 76

Servo(2) = 25

Servo(3) = 39

Servo(4) = 100

Wait 2


Servo(1) = 76

Servo(2) = 25

Servo(3) = 39

Servo(4) = 20

Wait 2


Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2


'--------------------//////////////////

Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000
```

Cls

Return

'/////////biru sedang//////////////

'/////////////////////////warna biru///////////////////////////////

'/////////////////////////warna tidak sesuai///////////////////////////////////

Warna_tidak_sesuai:

Locate 1 , 1

Lcd "warna tidak sesuai"

Locate 2 , 1

Lcd "kirim ke pembuangan"

Waitms 1000

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 25

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 28

Servo(2) = 24

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 28

Servo(2) = 20

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 80

Servo(2) = 25

Servo(3) = 25

Servo(4) = 100

Wait 2

Servo(1) = 80

Servo(2) = 25

Servo(3) = 39

Servo(4) = 100

Wait 2

Servo(1) = 80

Servo(2) = 25

Servo(3) = 39

Servo(4) = 20

Wait 2

Servo(1) = 56

Servo(2) = 20

Servo(3) = 45

Servo(4) = 80

Wait 2

Cls

Locate 1 , 1

Lcd "kotak telah sampai"

Waitms 2000

Cls

Return

'//////////////////////warna tidak sesuai/////////////////////////////