AUTOMATIC SPEED LIMITER

```
**************************************************************************
 $regfile = "89c51cc.dat"                  'To include 89c51 register files '
 $crystal = 12000000                       'crystal value'
 **************************************************************************

 Dim A As Byte, C As Byte
 Config Servos=2, Servos1=P3.4, Servos=P3.5, Reload = 50;

 nop
 nop
 nop

***************************** Port declaration *******************************
 P1 = H00
 P3=H00
 P0=B000011
 P2=B000011
****************************** Port assignment ******************************

 Speed1 Alias P0.0
 Speed2 Alias P0.1
 Speed3 Alias P0.2
 _left Alias P2.0
 _forward Alias P2.1
 _right Alias P2.2

 Red Alias P3.3
 Umber Alias P3.2
 Blue Alias P3.1
 Green Alias P3.0

 Waitms 100                                           ' time delay '

 While P2 = 7                                         ' free run '
 Servo1= 220
 Servo2 = 220
 Set Red
 Waitms 5                                             ' time delay '
 Wend
 A = 220
 V = 220
 Set Red

 Main:
 nop
 While P2=0
```

```
Wend
nop
nop
If Speed1 =0 Then                                      ' 75% speed '
A=170
C=170
Set Umber
Waitms 5
Elseif Speed2 = 0 Then                                 ' 50% speed '
A=120
C=120
P3=0
Set Blue
Waitms 5
Elseif Speed3 = 0 Then
A=100
C=100
P3=0
Set Green
Waitms 5
End If
nop
nop
nop
IP=0 Then
Goto Main1
End If
If_forward=0 Then
Goto Dri4                                              ' line scene '
Elseif_left=0 Then
Goto Dri5=0
Elseif_right=0 Then
Goto Dri6
End If
Goto Main

Dri4:                                                  ' forward '
Servo1 = A
Servo2=C
Waitms 1
Goto Main

Dri5:
Servo1=A
Servo2=0
Waitms 1
Goto Main
```

```
Dri6:
Servo1=0
Servo2=C
Waitms 1
Goto Main

Main1:
WhileP2=0
Wend
nop
nop
IfSpeed3=0 Then                                              ' 50% speed '
A=120
C=120
P3=0
Set Blue
Waitms 5
Elseif Speed2 =0                                             ' 75% speed '
A=170
C=17=
P3=0
Set Umber
Waitms 5
Elseif Speed1=0 Then
A=220
G=220
P3=0
Set Red
Waitms 5
End if
nop
nop
If P2=0 Then
Goto Main
End If
If_forward=0 Then
Goto Dri 14
Else if_left=0 Then
Goto Dri15
Elseif_right=0 Then
Goto Dri16
Else If
Goto main1


Dri 14:
Servo1= A
Servo2 = C                                                   ' forward '
Waitms 1
```

```
Goto Main1

Dri 15:
Servo1= A                                    ' move right '
Servo2 = 0
Waitms 1
Goto Main1


Dri 16:
Servo1= 0
Servo2 = C                                   'move left'
Waitms 1
Goto Main1

End
```