+5V

10 kΩ

220 Ω

0.1 µF

to pic kit

R_1

$R_1 = 470\ \Omega$

MCLR/VPP/RE3 1
RA0 2
RA1 3
RA2 4
RA3 5
RA4 6
RA5 7
Vss 8
RA7 9
RA6 10
RC0 11
RC1 12
RC2 13
RC3 14

28 RB7/ICSPDAT → to pic kit
27 RB6/ICSPCLK → to pic kit
26 RB5
25 RB4
24 RB3
23 RB2
22 RB1
21 RB0
20 VDD
19 Vss
18 RC7
17 RC6
16 RC5
15 RC4

+5V

0.1 µF

Initialization (runs only once at the start of the code)
  - Configure TRISA so that RA0-RA5 and RA7 are outputs
  - Configure ANSELA to Digital I/O
  - Configure PORTA so that RA0-RA5 = 0 and RA7 =1

while(1)
{
  - While(PORTA < 0xBF)
    {
      - Delay 250ms
      - Add one to PORTA
    }
  - Set PORTA back to start configuration (RA0-RA5=0) & RA7 = 1
}