```
//-------------------------------------------------------------------------
// Blinky.c
//-------------------------------------------------------------------------
//Author: Maheshwar Mangat
//Release 1.0 - 22-July-2013
//-Initial Revision
//
// Program Description:
//
// This program flashes the P1.4 RED LED on the Pt-51 target board at interval of 1 sec.
//
// How To Test:
//
// 1) Download code to a 'Pt-51' target board
// 2) Run the code and if the P1.4 LED blinks, the code works
//
//
//
// Target:         AT89C5131A
// Tool chain:     Keil C51
// Command Line:   None
//
//
//-------------------------------------------------------------------------
// Include necessary header files here
//-------------------------------------------------------------------------

#include <AT89C5131.h> // All SFR declarations for AT89C5131


 //-------------------------------------------------------------------------
 // Global Declarations
 //-------------------------------------------------------------------------

  sbit LED = P1^3;   //assigning label to P1^4 as "LED"

//-------------------------------------------------------------------------
// Function prototypes
//-------------------------------------------------------------------------

void delayms(unsigned int ms_sec);


//-------------------------------------------------------------------------
// main() Routine
//-------------------------------------------------------------------------

void main (void)
{
   P1=0x0F7; // port pin P1.3 as output
   LED=0;    //Initialise LED to 0;

   while (1)  // Loop forever
         {
```

```
                LED=~LED; // To toggle the LED
                      delayms(1);
          }
}

//------------------------------------------------------------------------------
// Function definitions
//------------------------------------------------------------------------------

//------------------------------------------------------------------------------
// void delayms(unsigned int ms_sec)
//------------------------------------------------------------------------------
//
// Return Value : None
// Parameters   : ms_sec as a value of delay in milliseconds
//
void delayms(unsigned int ms_sec)
{
    unsigned int i,j;
      for (i=0;i<ms_sec;i++)
      {
                for (j=0;j<355;j++) //This loop runs 355 times which approximately gives 1ms
delay with 24MHz system clock.
                {
                    //do nothing
                }
            }
}

//------------------------------------------------------------------------------
// End Of File
//------------------------------------------------------------------------------
```