```c
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//Accel.c
//Write a program in C which will input an analog value
//from the x-output of the ADXL335 accelerometer.
//Connect four LEDs to your board as shown in the figure below.
//The x-output puts out a voltage from 0 to 3.3 volts that
//is somewhat proportional to the amount of tilt along
//the x-axis. Your C program should indicate this tilt
//by lighting up one of the four LEDs to indicate full
//left to full right.

#include <at89c51cc03.h>

#define FIRST_LED  414
#define SECOND_LED 459
#define THIRD_LED  503
#define FORTH_LED  548


void turn_led(int num){
  P1_1 = 1;
  P1_2 = 1;
  P1_3 = 1;
  P1_4 = 1;

  switch(num){
    case 1:
      P1_1 = 0;
      break;

    case 2:
      P1_2 = 0;
      break;

    case 3:
      P1_3 = 0;
      break;

    case 4:
      P1_4 = 0;
      break;

    default:
      break;
  }
}

void main(void)
{
  unsigned char tmp;
  int i, result;
  double x;

  ADCF = 0x01; // P1.0 = ADC[0]
  ADCON = 0x20; // Enable ADC Function
  ADCLK = 0x00; // Prescaler to 0
  EA = 0; //Turn off interrupts

  result = 0;
  x = 0;
  i = 0;

  while(1)
  {
    ADCON &= 0xF8; // Reset ADC Channel Select
    ADCON |= 0x00; // Select ADC = Ch0
    ADCON |= 0x20; // Use Standard mode
    ADCON |= 0x08; // Start ADC Convert

    tmp = (ADCON & 0x10); // Get done bit
    while(tmp != 0x10) // Loop until complete
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73          tmp = (ADCON & 0x10);
74        result = ADDH; // Send 8 MSB to P2
75        result *= 4;
76        result += ADDL;
77
78        if (result < FIRST_LED - 45)
79          turn_led(5);
80        else if (result < FIRST_LED)
81          turn_led(1);
82        else if (result < SECOND_LED)
83          turn_led(2);
84        else if (result < THIRD_LED)
85          turn_led(3);
86        else if (result < FORTH_LED)
87          turn_led(4);
88        else
89          turn_led(5);
90
91        ADCON &= 0xEF; //clear ADEOC = 0
92
93        for (i = 0; i < 33; i++);
94      }
95    }
```