

```

/*
 * Date written: August 9, 2002
 * Written by: Peraphon Sophatsathit
 *             Department of Mathematics, Faculty of Science
 *             Chulalongkorn University.
 *             email: peraphon.s@chula.ac.th
 *             http://pioneer.netserv.chula.ac.th/~sperapho
 * Classnote: Sample #1 for 2301171 tutorial (Distant Learning Program)
 * Description: This is a sample program written to illustrate how variables
 *             can be used as loop control (upper and lower limits) and
 *             result decision factor (odd or even).
 * Assumption: No input validation is performed.
 */

#include <stdio.h>
#define Num 8

int
main(void)
{
    char answer, junk;
    int first, next, result;
    int count, i;

    printf("Enter lower and upper limits.\n");
    printf("lower limit ->");
    scanf("%d", &first);
    printf("upper limit ->");
    scanf("%d", &next);
    scanf("%c", &junk); /* throw away new line */
    printf("Do you want odd or even (y-odd, n-even)? ");
    scanf("%c", &answer);
    /*
     * determine odd or even number, assuming all answers except 'y' are even.
     */
    if (answer == 'y')
        result = 1;
    else
        result = 0;
    /*
     * begin loop
     */
    for (count = 0, i = first; i <= next; i++)
    {
        if (i % 2 == result)
        {
            printf("%6d", i);
            count++;
            if (count % Num == 0) /* print Num per line */
                printf("\n");
        }
    }
    printf("\n");
    return 0;
}

```