

```

#include <stdio.h>

int main( void )
{
    int row; /* row counter */
    int col; /* column counter */
    int space; /* spaces counter */

    /* Pattern A, loop 10 times for rows */
    for ( row = 1; row <= 10; row++ ) {

        /* print row asterisks */
        for ( col = 1; col <= row; col++ ) {
            printf( "*" );
        } /* end for */

        printf( "\n" );
    } /* end for */

    printf( "\n" );

    /* Pattern B, loop 10 times for rows
       row counts down to correspond to number of asterisks */
    for ( row = 10; row >= 1; row-- ) {

        /* print row asterisks */
        for ( col = 1; col <= row; col++ ) {
            printf( "*" );
        } /* end for */

        printf( "\n" );
    } /* end for */

    printf( "\n" );

    /* Pattern C, loop 10 times for rows
       row counts down to correspond to number of asterisks */
    for ( row = 10; row >= 1; row-- ) {

```

```

    /* print (10 - row) number of preceding spaces */
    for ( space = 1; space <= 10 - row; space++ ) {
        printf( " " );
    } /* end for */

    /* print row asterisks */
    for ( col = 1; col <= row; col++ ) {
        printf( "*" );
    } /* end for */

    printf( "\n" );
} /* end for */

printf( "\n" );

/* Pattern D, loop 10 times for rows */
for ( row = 1; row <= 10; row++ ) {

    /* print (10 - row) number of preceding spaces */
    for ( space = 1; space <= 10 - row; space++ ) {
        printf( " " );
    } /* end for */

    /* print row asterisks */
    for ( col = 1; col <= row; col++ ) {
        printf( "*" );
    } /* end for */

    printf( "\n" );
} /* end for */

printf( "\n" );

return 0; /* indicate successful termination */
} /* end main */

```

