

## Tutorial 8 - Programming Practice III

*This tutorial is yet another exercise in writing C programs. In this tutorial you will write a program to emulate the "Etch-a-Sketch" drawing toy.*

In this tutorial you will write a program to emulate the "Etch-a-Sketch" toy. Your program should begin by clearing the screen using the `clrscr()` function (defined in the header file `conio.h`), then enter an infinite loop in which it reads characters from the keyboard using the `getch()` function and prints an 'X' character on the screen to allow you to draw pictures on the screen.

The input characters `u`, `d`, `l`, or `r` should move the cursor up, down, left or right by one position (using the `gotoxy()` function) and then print one character (X) using the `putchar()` function.

You will have to keep track of the current cursor position using two integer variables (e.g. `x` and `y`). You should initialize these variables so that the drawing starts approximately at the center of the screen.

Note that the `x` screen coordinates range from 0 to 79 (left to right) and the `y` coordinates go from 0 to 24 (top to bottom).

As usual, try to decompose the problem into simpler parts until you think each one of them can be expressed as a C statement.