

Sine Wave

Sometimes it's the simple things that you want. Nothing challenging, nothing involved. Just a few simple lines of code that produce something pretty to look at. This program uses the sine function to make a sinuous curve down your computer screen. There's not much to it, but that's part of the appeal.

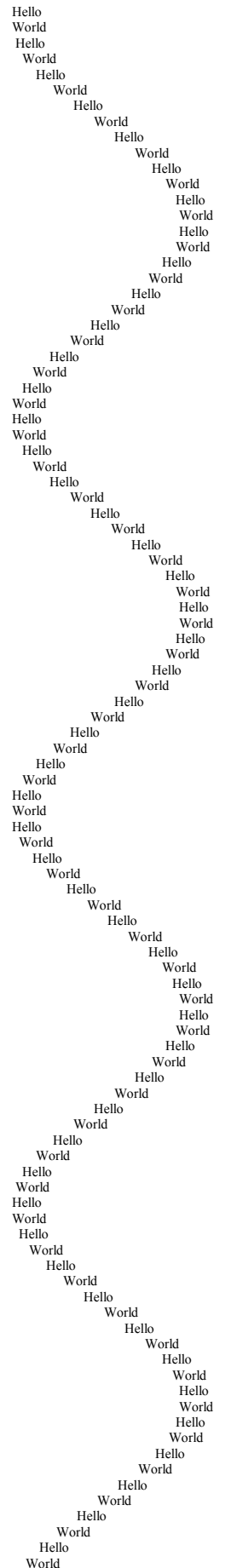
Sine Wave is by R. Alan Monroe inspired by a BASIC program of the same name by David H. Ahl as found in *101 BASIC Games* © 1978.

```
/* sinewave.c listing begins: */
#include <stdio.h>
#include <math.h>

int main()
{
    float t, a;
    int s, b;

    b=0;
    for (t=0; t<40; t+=.25) {
        a = 26 + 25 * sin(t);
        for (s=0; s < a; s++) printf(" ");
        if (b==0) {
            printf( "Hello\n" );
            b=1;
        } else {
            printf( "World\n" );
            b=0;
        }
    }

    return 0;
}
```

A sinuous curve of 'Hello' and 'World' text. The text is arranged in a wave-like pattern, with 'Hello' and 'World' alternating in a way that creates a smooth, undulating line across the page. The words are stacked vertically, with 'Hello' appearing on even-numbered lines and 'World' on odd-numbered lines, creating a rhythmic, wave-like visual effect. The curve starts at the top left and ends at the bottom right, with the words following the path of the sine wave.