#include <conio.h>

#include <math.h>

#include <graphics.h>

#include <dos.h>

int main() {

    int gd = DETECT, gm;

    int angle = 0;

    double x, y;

    initgraph(&gd, &gm, "C:\\TC\\BGI");

line(0, getmaxy() / 2, getmaxx(), getmaxy() / 2);

 /\* generate a sine wave \*/

 for(x = 0; x < getmaxx(); x+=3) {

     /\* calculate y value given x \*/

     y = 50\*sin(angle\*3.141/180);

     y = getmaxy()/2 - y;

     /\* color a pixel at the given position \*/

  putpixel(x, y, 15);

  delay(100);

  /\* increment angle \*/

  angle+=5;

 }

 getch();

 /\* deallocate memory allocated for graphics screen \*/

 closegraph();

 return 0;

}