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#include<bits/stdc++.h>
#include<graphics.h>

using namespace std;

// function to translate line
void translateLine ( int P[][2], int T[])
{
    /* init graph and line() are used for
       representing line through graphical
       functions
    */
    int gd = DETECT, gm, errorcode;
    initgraph (&gd, &gm, "c:\\tc\\bgi");

    // drawing original line using graphics functions
    setcolor (2);
    line(P[0][0], P[0][1], P[1][0], P[1][1]);

    // calculating translated coordinates
    P[0][0] = P[0][0] + T[0];
    P[0][1] = P[0][1] + T[1];
    P[1][0] = P[1][0] + T[0];
    P[1][1] = P[1][1] + T[1];

    // drawing translated line using graphics functions
    setcolor(3);
    line(P[0][0], P[0][1], P[1][0], P[1][1]);
    closegraph();
}

// driver program
int main()
{
    int P[2][2] = {5, 8, 12, 18}; // coordinates of point
    int T[] = {2, 1}; // translation factor
    translateLine (P, T);
    return 0;
}

```