Розробити програму для перевірки двох відрізків на перетин вище описаними способами.

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| #include <windows.h>  #include <iostream>  using namespace std;  struct pt {  int x, y;  };  inline int area (pt a, pt b, pt c) {  return (b.x - a.x) \* (c.y - a.y) - (b.y - a.y) \* (c.x - a.x);  }  inline bool intersect\_1(int a, int b, int c, int d) {  if (a > b) swap (a, b);  if (c > d) swap (c, d);  return max(a,c) <= min(b,d);  }  bool intersect(pt a, pt b, pt c, pt d) {  return intersect\_1 (a.x, b.x, c.x, d.x)  && intersect\_1 (a.y, b.y, c.y, d.y)  && area(a,b,c) \* area(a,b,d) <= 0  && area(c,d,a) \* area(c,d,b) <= 0;  }  void drawLine(pt o, pt a, pt b, bool t){  HWND console\_handle = GetConsoleWindow();  HDC device\_context = GetDC(console\_handle);  int cr = (!t)\*255,  cg = ( t)\*255,  cb = (!t)\*255;  HPEN pen = CreatePen(PS\_SOLID, 3, RGB(cr, cg, cb));  SelectObject(device\_context, pen);  MoveToEx(device\_context, o.x+a.x, o.y+a.y, NULL);  LineTo(device\_context, o.x+b.x, o.y+b.y);  ReleaseDC(console\_handle, device\_context);  }  int main(){  setlocale(LC\_ALL, "Ukrainian");  pt a, b, c, d;  cout << " | X | Y |\r\n";  cout << " A | ";  cin >> a.x >> a.y;  cout << " B | ";  cin >> b.x >> b.y;  cout << " C | ";  cin >> c.x >> c.y;  cout << " D | ";  cin >> d.x >> d.y;  cout << "---|-------|\r\n";  cout << (intersect(a, b, c, d) ? "П" : "Не п") << "еретинаються";  pt offset = {200, 0};  drawLine(offset, a, b, 0);  drawLine(offset, c, d, 1);  system("pause>>NUL");  return 0;  } |

