#include <graphics.h>

#include <conio.h>

#include <dos.h>

#include <iostream>

// Function to draw a convex polygon

void drawConvexPolygon(int points[][2], int n) {

// Draw the polygon using the points array

for (int i = 0; i < n - 1; i++) {

line(points[i][0], points[i][1], points[i + 1][0], points[i + 1][1]);

}

// Connect the last point to the first to close the polygon

line(points[n - 1][0], points[n - 1][1], points[0][0], points[0][1]);

}

// Main function

int main() {

// Initialize the graphics window

int gd = DETECT, gm;

initgraph(&gd, &gm, "");

// Define the vertices of the convex polygon (for example, a pentagon)

int points[5][2] = {{200, 150}, {400, 50}, {600, 150}, {500, 300}, {300, 300}};

// Set the color of the polygon's boundary

setcolor(WHITE);

// Draw the polygon

drawConvexPolygon(points, 5);

// Flood fill the polygon with a color (e.g., BLUE)

// We use the interior of the polygon (e.g., (400, 200)) as the starting point for flood fill.

floodfill(400, 200, WHITE);

// Wait for user input to close the program

getch();

closegraph();

return 0;

}