

Readme

Rum main.cpp

Polygon.h : Contains all class definitions and function prototypes.

Polygon.cpp : Contains all the function definitions.

main.cpp : Contains the instantiation of the classes and test case implementations.

Sample Test case :

Rectangle coordinates

Lower left coordinates : (-2,-1)

Upper right coordinates : (5,2)

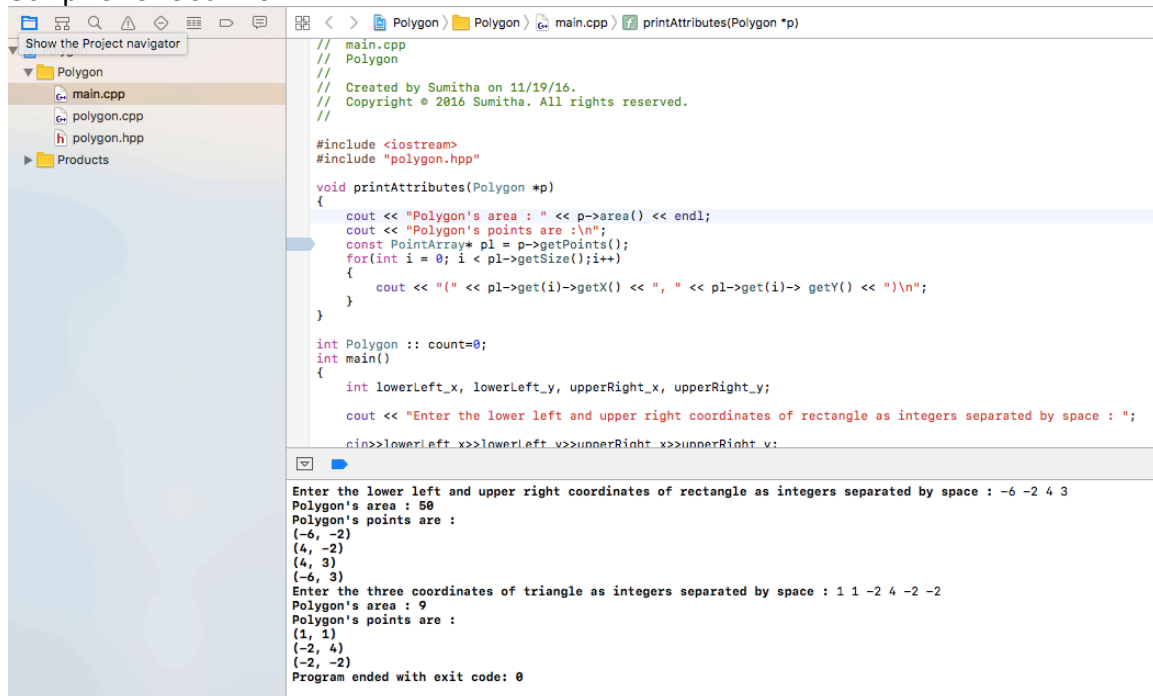
Area : 50

Triangle coordinates

(1,1),(-2,4),(-2,-2)

Area : 9

Sample execution



```
// main.cpp
// Polygon
// Created by Sumitha on 11/19/16.
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//

#include <iostream>
#include "polygon.hpp"

void printAttributes(Polygon *p)
{
    cout << "Polygon's area : " << p->area() << endl;
    cout << "Polygon's points are :\n";
    const PointArray* pl = p->getPoints();
    for(int i = 0; i < pl->getSize();i++)
    {
        cout << "(" << pl->get(i)->getX() << ", " << pl->get(i)-> getY() << ")\n";
    }
}

int Polygon :: count=0;
int main()
{
    int lowerLeft_x, lowerLeft_y, upperRight_x, upperRight_y;

    cout << "Enter the lower left and upper right coordinates of rectangle as integers separated by space : ";
    cin>>lowerLeft_x>>lowerLeft_y>>upperRight_x>>upperRight_y;

    Enter the lower left and upper right coordinates of rectangle as integers separated by space : -6 -2 4 3
    Polygon's area : 50
    Polygon's points are :
    (-6, -2)
    (4, -2)
    (4, 3)
    (-6, 3)
    Enter the three coordinates of triangle as integers separated by space : 1 1 -2 4 -2 -2
    Polygon's area : 9
    Polygon's points are :
    (1, 1)
    (-2, 4)
    (-2, -2)
    Program ended with exit code: 0
```