

/*Q3Implement function triangleArea(a,b,c) that takes as input the lengths of the 3 sides of a triangle and returns the area of the triangle. By Heron's formula, the area of a triangle with side lengths a, b, and c is $s(s - a)(s - b)(s - c)$, where $s = (a+b+c)/2$. >>> triangleArea(2,2,2)
1.7320508075688772

```
public class Program
{
    public static void Main()
    {
        Console.WriteLine("Hello World");
        Console.WriteLine(triangleArea(2, 2, 2));
    }
    public static double triangleArea(double a, double b, double c)
    {
        double s = (a + b + c) / 2;
        double area = Math.Sqrt((s * (s - a) * (s - b) * (s - c)));
        return area;
    }
}
```

/*Q5[a] a. Write a function inside(x,y,x1,y1,x2,y2) that returns True or False depending on whether the point (x,y) lies in the rectangle with lower left corner (x1,y1) and upper right corner (x2,y2). >>> inside(1,1,0,0,2,3) True >>> inside(-1,-1,0,0,2,3) False*/

```
using System;
public class Program
{
    public static void Main()
    {
        Console.WriteLine(inside(-1, -1, 0, 0, 2, 3));

        Console.WriteLine(inside(1, 1, 0.5, 0.2, 1.1, 2));
    }
    public static bool inside(double x, double y, double x1, double y1, double x2,
double y2)
    {
        if ((x > x1) && (x < x2))
        {
            if ((y > y1) && (y < y2))
            {
                return true;
            }
            else
            {
                return false;
            }
        }
        else
        {
            return false;
        }
    }
}
```

```
}  
Microsoft Visual Studio Debug Console  
False  
True  
C:\Users\Tejendhra Indukuri\source\repos\ConsoleApp2\ConsoleApp2\bin\Debug\netcoreapp3.1\ConsoleApp2.exe (process 15860)  
exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console  
when debugging stops.  
Press any key to close this window . . .
```