Aim:

Write a program to find the `area` of a **triangle** using Heron's formula.

During execution, the program should print the following message on the console:

```
sides:
```

For example, if the user gives the following as **input** (input is positive floating decimal point numbers):

```
sides: 2.3 2.4 2.5
```

Then the program should **print** the result round off upto 2 decimal places as:

```
area: 2.49
```

Instruction: Your input and output layout must match with the sample test cases **(values as well as text strings)**.

The area of a triangle is given by `Area = √ p(p − a)(p − b)(p − c)`, where `p` is half of the perimeter, or `(a + b + c) / 2`. Let a,b,c be the lengths of the sides of the given triangle.

Hint: Use `sqrt` function defined in `math.h` header file

Source Code:

Program313.c

```c
/* Write your complete code here and Map your output with the visible as well
as
   hidden test cases.*/#include<stdio.h>
   #include<math.h>
   int main()
   {
      float p,a,b,c,area;
      printf("sides: ");
      scanf("%f%f%f" ,&a,&b,&c);
      p = (a+b+c) / 2;
      area = sqrt(p*(p-a)*(p-b)*(p-c));
      printf("area: %0.2f\n" ,area);
   }
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
sides: 2.3 2.4 2.5
area: 2.49

Test Case - 2
User Output

```
sides:  2.6 2.7 2.8
area: 3.15
```