

Program 2

Develop a C program to find the area of a triangle given its sides as input using functions.

```
#include <stdio.h>
```

```
#include <conio.h>
```

```
#include <math.h>
```

```
float area(float, float, float);
```

```
int main()
```

```
{
```

```
float a, b, c;
```

```
printf("This is a program to calculate the area  
of a triangle provided you input the lengths  
of all 3 sides of the triangle. \n");
```

```
printf("Enter the lengths of the three sides of  
the triangle. \n");
```

```
scanf("%f %f", &a, &b, &c);
```

```
printf("The area of the triangle is = %f square  
units \n", area(a, b, c));
```

```
return 0;
```

```
}
```

```
float area(float x, float y, float z)
```

```
{
```

```
float s = (x + y + z) / 2;
```

```
float a = sqrt(s * (s - x) * (s - y) * (s - z));
```

```
return a;
```

```
}
```