

```
/** Program to Find Area of a Triangle using Hero s Formula */
```

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

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

```
main()
```

```
{
```

```
    float a, b, c, s, area;
```

```
back:
```

```
    printf("\nEnter three sides of a triangle: ");
```

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

```
    if (a==0 || b==0 || c==0)
```

```
    {
```

```
        printf("\nValue of any side should not be equal to  
                zero\n");
```

```
        goto back;
```

```
    }
```

```
    if (a+b<c || b+c<a || c+a<b)
```

```
    {
```

```
        printf("\nSum of two sides should not be less than
```

```
third\n");
```

```
        goto back;
```

```
    }
```

```
    s = (a + b + c) / 2;
```

```
    area = sqrt(s * (s - a) * (s - b) * (s - c));
```

```
    printf("\n\nArea of triangle: %.2f", area);
```

```
    getch();
```

```
}
```